

“(E) The total amount that DOD may pay for the applicable premium of a health benefits plan for a member under this paragraph in a fiscal year may not exceed the amount determined by multiplying—

“(i) the sum of one plus the number of the member's dependents covered by the health benefits plan, by

“(ii) the per capita cost of providing TRICARE coverage and benefits for dependents under this chapter for such fiscal year, as determined by the Secretary of Defense.

“(F) The benefits coverage continuation period under this paragraph for qualified health benefits plan coverage in the case of a member called or ordered to active duty is the period that—

“(i) begins on the date of the call or order; and

“(ii) ends on the earlier of the date on which the member's eligibility for transitional health care under section 1145(a) of this title terminates under paragraph (3) of such section, or the date on which the member elects to terminate the continued qualified health benefits plan coverage of the dependents of the member.

“(G) Notwithstanding any other provision of law—

“(i) any period of coverage under a COBRA continuation provision (as defined in section 9832(d)(1) of the Internal Revenue Code of 1986) for a member under this paragraph shall be deemed to be equal to the benefits coverage continuation period for such member under this paragraph; and

“(ii) with respect to the election of any period of coverage under a COBRA continuation provision (as so defined), rules similar to the rules under section 4980B(f)(5)(C) of such Code shall apply.

“(H) A dependent of a member who is eligible for benefits under qualified health benefits plan coverage paid on behalf of a member by the Secretary concerned under this paragraph is not eligible for benefits under the TRICARE program during a period of the coverage for which so paid.

“(I) A member who makes an election under subparagraph (A) may revoke the election. Upon such a revocation, the member's dependents shall become eligible for benefits under the TRICARE program as provided for under this chapter.

“(J) The Secretary of Defense shall prescribe regulations for carrying out this paragraph. The regulations shall include such requirements for making an election of payment of applicable premiums as the Secretary considers appropriate.

“(5) For the purposes of this section, all members of the Ready Reserve who are to be called or ordered to active duty include all members of the Ready Reserve.

“(6) The Secretary concerned shall promptly notify all members of the Ready Reserve that they are eligible for screening and care under this section.

Mr. WARNER. Mr. President, I ask unanimous consent that at 2:15 p.m. today, there be a period of 5 minutes prior to a vote in relation to the modified Graham amendment No. 696; provided further, that if the amendment is agreed to, the underlying amendment No. 689 then be agreed to, as amended.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. WARNER. Mr. President, for clarification, the 5 minutes will be equally divided between the two sides.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. REID. Also, Mr. President, there are some arrangements being made to

have some disposition of the Reed of Rhode Island amendment sometime this afternoon.

Mr. WARNER. Mr. President, the distinguished leader is correct. Efforts are being made to see if that can be worked out. If those good-faith efforts do not materialize, then, of course, the Senator is entitled to a recorded vote or a voice vote, whatever is his preference.

Mr. REID. It is my understanding Senator KENNEDY will be here early this afternoon to offer his amendment or amendments.

Mr. WARNER. The Senator is correct. The Senator from Michigan spoke to me before he departed the floor saying that was his desire and he will be speaking.

We can now stand in recess until the hour of 2:15 p.m.

RECESS

The PRESIDING OFFICER. Under the previous order, the Senate stands in recess until 2:15 p.m.

Thereupon, the Senate, at 12:49 p.m., recessed until 2:15 p.m. and reassembled when called to order by the Presiding Officer (Mr. BENNETT).

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2004—CONTINUED

AMENDMENT NO. 696

The PRESIDING OFFICER. Under the previous order, there will now be 5 minutes equally divided prior to a vote with respect to the Graham of South Carolina amendment.

Who yields time?

The Senator from South Carolina.

Mr. GRAHAM of South Carolina. If it is appropriate with Senator SESSIONS, I will proceed.

Mr. SESSIONS. Mr. President, I understand we are in 5 minutes debate on each side and then there will be a vote on this amendment.

The PRESIDING OFFICER (Mr. CHAMBLISS). It is 5 minutes evenly divided.

Mr. SESSIONS. I am pleased to yield to the Senator from South Carolina on his time.

The PRESIDING OFFICER. The Senator from South Carolina is recognized.

Mr. GRAHAM of South Carolina. Mr. President, I thank the Senator for yielding. I have been working with Senators on both sides of the aisle to approve a compensation package for guardsmen and reservists. We have a modification to Senator DASCHLE's amendment. I second-degreed his amendment last night. We have reached a compromise where we merged the best of the two packages. Basically, what we are trying to do is make sure that Guard and Reserve members, if they choose to, can become members of TRICARE, the military health care network for military members and their families, by paying a premium. It would be what a retiree

pays plus \$100 for an enlisted Guard or Reserve member, \$150 for an officer. So it is a very good deal for the Reserve and Guard families. They pay into the system if they choose to be a member of TRICARE. That way when they are called to active duty they do not leave one health care plan for another. They will have continuity of health care. They do not get bounced around between systems. It would really help with recruitment and retention. It has been a bipartisan effort like none I have ever experienced.

I want to add cosponsors, and then I will yield for Senator DEWINE, who has been a tremendous leader on this issue. I ask unanimous consent that the following Senators be added as cosponsors to this compromise product: Senators CLINTON, DEWINE, KENNEDY, MILLER, ALLEN, LEAHY, STABENOW, MIKULSKI, LANDRIEU, CHAMBLISS, CAMPBELL, COLLINS, and DORGAN.

I compliment Senator DASCHLE for his fine efforts in making this possible.

The PRESIDING OFFICER. Without objection, it is so ordered.

The Senator from Ohio.

Mr. DEWINE. I thank the entire military coalition for all their hard work and support for this effort. I thank all of my colleagues. I also thank General Smith of the Ohio National Guard for all they have done to keep this initiative moving forward.

As my colleagues are well aware, our amendment would offer a comprehensive approach to health coverage for members of our military reserve component. Put simply, it would provide a critical health care safety net for service members and their families by offering uninterrupted, affordable health insurance.

I can't emphasize enough how important this is both as a readiness and as a retention issue.

We know how important it is that we fund our military hardware and base installations. But, at the same time, we can't ignore our military personnel. We can't ignore the very men and women who voluntarily lay their lives on the line to protect our national security. It's the very least we can do, particularly as we continue to rely more and more on our Reserve and National Guard.

Our amendment is an important sign of support for those called to serve, as well as their families. I urge my colleagues to support it.

I yield the floor.

Mr. KENNEDY. Mr. President, this amendment is intended to close an unfortunate and unacceptable gap in health insurance coverage for families of Reserve and Guard members who are called up for active duty in the Armed Forces. The amendment is a needed step forward in taking care of our troops and their families, and it includes most of the provisions of S. 647 that I introduced earlier this year to close the gap.

Today's military relies more heavily than ever on the Reserve and Guard.

Over 215,000 Guard and Reserve soldiers, sailors, marines, and airmen have been mobilized in support of Operation Iraqi Freedom, Operation Enduring Freedom, and Operation Noble Eagle. One challenge they should not have to face is maintaining their health insurance coverage. The problem is that few employers are willing to continue health insurance coverage for Guard and Reserve employees and family members when they are activated.

According to the General Accounting Office, nearly 80 percent of reservists have health care coverage when they are working in the private sector. Almost all of them would like to maintain that coverage when they are activated, in order to provide continued health benefits for their family members. The military's TRICARE coverage works well for the reservists when they are activated, but it is not a realistic alternative for family members since more TRICARE providers are located close to military bases that are often far from the homes where the family members of the reservists continue to live.

In fact, 95 percent of active-duty military families live near bases and health care facilities, so TRICARE is readily available to them. But only 25 percent of Guard and Reserve families live near bases, so TRICARE is inaccessible for them. Nevertheless, the other reservists feel they have no alternative, since their private insurance has lapsed. So they change to TRICARE while they are activated, and then change back to their former plan when the activation ends.

This amendment will enable them to enroll their family members in TRICARE, too. It is the right thing to do but it solves only part of the problem.

When TRICARE is not a realistic alternative for family members, they have the option to maintain their private health insurance plan during the activation. The frequency and length of activations for Guard and Reserves are disruptive and stressful enough. We should do everything we can to enable families to maintain their coverage and avoid unnecessary upheaval.

We had hoped to achieve that goal in this amendment as well, but the consent agreement means we cannot include it. So I urge the Senate to adopt the pending amendment to make TRICARE available to Reserve and Guard personnel and families and let us work together to deal with this other aspect of the problem, too.

Mr. LEAHY. Mr. President, I rise today in strong support of the Graham-Daschle amendment to the fiscal year 2004 Defense authorization bill. This amendment will take a much needed step to improve the readiness and strength of the National Guard and Reserve by ensuring that more of our citizen-soldiers have adequate health insurance.

Almost 220,000 members of the Guard and Reserve answered the call to duty

for the war in Iraq. These volunteer soldiers, sailors, airmen, and marines have responded with professionalism, skill, and honor. In my own State, hundreds of members of the Green Mountain Boys from the Vermont National Guard were deployed to Iraq, Afghanistan and throughout the United States to answer the call to service. Our Nation's military would not be as large or as strong without these dedicated—and often-used—soldiers. Time and time again, the Total Force concept that we in Congress developed and promoted has given our military unparalleled strength and unity.

The increased callups of the Reserves since September 11 has raised some problems that threaten the long-term readiness of this critical force and—in turn—of our entire military structure. A recent GAO study underscored that more than 20 percent of those reservists ready to deploy at a moment's notice do not have health insurance. At least 500 of the 4,000 members of the Vermont National Guard currently do not have coverage. These shortfalls mean that there are reservists who are reporting for duty who have not had routine access to doctors, to treatment, or medicine they might need, or to hospitals. These soldiers—ready to make the ultimate sacrifice at any moment—may not be in the best physical shape because our Government is not protecting its investment.

At the same time, many families in Vermont and in other States have told me about substantial turbulence from the callups. Even beyond the understandable worry of watching a loved one head off for battle and dealing with loss of income from the temporary departure from a civilian job, families have had to experience the frustration and confusion created by switching health insurance plans. This disruption has resonated from the home front to the frontlines, becoming a factor in reservists' willingness to stay in service. These patriots make selfless decisions to sacrifice time with their families. Some sacrifice their own lives in the line of duty to their country. When we ask a reservist or a guardsman to answer the call, it is our duty to help them take proper care of their families and to make the transition to active duty as easy as possible.

This amendment is a version of S. 852, the National Guard and Reserve Comprehensive Health Benefits Act of 2003. I worked closely with Senators GRAHAM, DASCHLE, DEWINE, CLINTON, and SMITH in crafting this legislation to deal with medical readiness problems for our National Guard in two main ways. First, the legislation makes members of the Guard and Reserve eligible to enroll in TRICARE on a cost-share basis. Second, it allows families to apply to the Defense Department to receive reimbursement for keeping their current health plans during a deployment. The reimbursement is capped to ensure that the costs are no greater than putting the family on TRICARE.

This legislation is cost-effective, solving the problem with the minimum necessary expenditures. The Congressional Budget Office has informally scored the entire bill at \$4 billion over 5 years, going from about \$350 million in the first year and leveling out at about \$1.1 billion per year in the fifth year. Figures from the GAO report confirm these cost estimates.

This Reserve health care amendment will cost far less than increasing active-duty end-strength or than having to substantially increase recruiting and retention programs—steps which will be necessary if adequate support is not provided to our Reserves.

Let me make sure everyone is clear about what this vote means. A vote in support of the amendment is a vote to ensure a vibrant future for the Guard and Reserve. It is a vote that recognizes, as have all of the major military associations, that we cannot continue to have a Total Force if the benefit structure for the Reserves is not improved. A vote against the Daschle amendment means treating the Guard and Reserve as low-paid contractors to the military—the temporary hires who can do the job but who cost less because they do not have the proper salaries, benefits, and protections as their full-time counterparts.

At a time when the Nation has never relied more heavily on the National Guard and Reserve, I urge all Senators to vote in support of the Graham-Daschle amendment, which will ensure a healthy, effective military into the foreseeable future.

I ask unanimous consent that several endorsement letters from various military Reserve associations be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

NATIONAL GUARD ASSOCIATION
OF THE UNITED STATES,
Washington, DC, April 10, 2003.

Hon. PATRICK LEAHY,
U.S. Senate,
Washington, DC.

DEAR SENATOR LEAHY. On behalf of the men and women of the National Guard Association of the United States (NGAUS), I thank you for the stalwart support you have given the National Guard over the years. The NGAUS is pleased to offer its support for your legislation entitled the National Guard and Reserve Comprehensive Health Benefits Act of 2003. This important legislation would offer members of the selected reserve and their families, the opportunity to participate in the Tricare on a cost-share basis; provide a partial subsidy of private health insurance premiums for family members of Guardsmen who wish to retain their private health insurance; and improve transition coverage upon deactivation.

The National Guard and Reserve contributions to the ongoing operations in Iraq, fighting the global war on terrorism, protecting the homeland, and supporting contingency operations around the world are a key indicator of the importance of maintaining a high level of readiness. The General Accounting Office recently found more than twenty-one percent of National Guard and Reserve members do not have health coverage. Forty percent of those individuals

without insurance are in the junior enlisted ranks.

Units with nearly twenty-one percent of its member unable to deploy due to medical reasons has a major impact on the ability of that unit to complete its mission. Providing Tricare during all phases of service can decrease an already lengthy mobilization process by ensuring medical readiness is routinely sustained. Medical readiness is an important factor in unit readiness.

Recent National Guard mobilizations have demonstrated how quickly the guard can be ready to fulfill their federal mission. Some of these notifications for mobilization have given Guardsmen hours and days, as opposed to the days and weeks normally required. This reduced ramp also requires members of the Guard to maintain their family readiness plans in order to lessen the complications and distractions during deployments. Providing continuity of health coverage for family members will ensure those who support our service members and make it possible for them to serve, are provided for while their loved ones are away.

As always, the NGAUS stands ready to assist you and looks forward to our continued relationship ensuring a strong and viable National Guard.

Sincerely,

RICHARD C. ALEXANDER,
Major General (RET), AUS,
President.

THE MILITARY COALITION,
Alexandria, VA, April 15, 2003.

Hon. MIKE DEWINE,
U.S. Senate,
Washington, DC.

DEAR SENATOR DEWINE: The Military Coalition (TMC), a consortium of nationally prominent uniformed services and veterans organizations representing more than 5.5 million current and former members of the seven uniformed services, plus their families and survivors, would like to thank you for introducing S. 852, the National Guard and Reserve Comprehensive Health Benefits Act of 2003. This important legislation would offer members of the Selected Reserve and their families the opportunity to participate in the Tricare program on a cost-share basis; provide a partial subsidy of private health insurance premiums for family members of Guardsmen and Reservists who wish to retain their private health insurance; and improve transition coverage upon demobilization. This initiative to improve healthcare readiness for members of the National Guard and Reserve components and their families is at the forefront of TMC's priorities for that community.

The National Guard and Reserve components' contributions to the ongoing operations in Iraq, fighting the global war on terrorism, protecting the homeland, and supporting contingency operations around the world are key indicators of the importance of maintaining a high level of readiness. The General Accounting Office recently found more than 21 percent of National Guard and Reserve members do not have health coverage. Forty percent of those individuals without insurance are in the junior enlisted ranks.

Providing Tricare during all phases of service can decrease an already lengthy mobilization process by ensuring medical readiness is routinely sustained. Medical readiness is a critical factor in mission readiness.

Recent National Guard and Reserve mobilizations have demonstrated how quickly these forces can be ready to fulfill their war-fighting mission. Some notifications for mobilization have given Guardsmen and Reservists hours and days, rather than weeks and months once required. This reduced alert

ramp also requires members of the Guard and Reserve to maintain their family readiness plans in order to lessen the complications and distractions during deployments. Providing continuity of health coverage for family members will ensure those who support our service members and make it possible for them to serve, are provided for while their loved ones are away.

The Military Coalition supports S. 852 and applauds your efforts to ensure a strong and viable National Guard and Reserve as an integral component of our nation's total force.

Sincerely,

THE MILITARY COALITION.

ADJUTANTS GENERAL ASSOCIATION
OF THE UNITED STATES,
Washington, DC,

Senator MIKE DEWINE,
U.S. Senate, Russell Senate Office Building,
Washington, DC.

Senator TOM DASCHLE,
U.S. Senate, Hart Senate Office Building,
Washington, DC.

Senator PATRICK LEAHY,
U.S. Senate, Russell Senate Office Building,
Washington, DC.

Senator GORDON SMITH,
U.S. Senate, Russell Senate Office Building,
Washington, DC.

DEAR SENATORS DEWINE, DASCHLE, LEAHY AND SMITH: On behalf of the Adjutants General of the 54 states and territories I want to thank you for your introduction and support of S. 852, National Guard and Reserve Comprehensive Health Benefits Act of 2003. The introduction of S. 852 brings the Adjutants General Association of the United States another step closer to its goal of providing optional, contributory TRICARE coverage to members of the Guard and Reserve and their families.

The provision of health care to Guard and Reserve members has been a priority of our Association since our Strategic Planning Committee introduced the issue to the Adjutants General in August 2000. Your legislation encompasses all of the essential elements that our Association has sought since that time.

All of my fellow Adjutants General have indicated their support of your initiative. We pledge our support in securing passage of S. 852 and we will continue to request additional co-sponsorship of the bill by the senators from our respective states. Please share this letter of support with your Senate colleagues as you consider further action.

Once again, we thank you for your outstanding effort on behalf of the Guard and Reserve.

Sincerely,

JOHN F. KANE,
Major General, President.

The PRESIDING OFFICER. Who seeks time? The time of the sponsors has expired.

Who yields time in opposition? The Senator from Alabama.

Mr. SESSIONS. Two and a half minutes per side?

The PRESIDING OFFICER. Two and a half minutes in opposition.

Mr. SESSIONS. Mr. President, I served as a reservist for over 10 years. Some of my best friends are reservists. My Army Reserve partner is now my chief of staff. I have a lot of good friends in the Army Reserve and National Guard. They have a lot of needs. There is much we can do for them. I have not specifically been hearing in my State this insurance question, although I can list half a dozen other

items reservists have told me that are important to them. I do not think we have had the kind of serious study about what should be our priority in helping reservists be more willing to serve. They are doing a tremendous job at this point in time. We have had 400 special forces National Guardsmen from my State in Iraq and Afghanistan; several have been wounded. They are critical to our Nation.

But we have not thought this through. We do not have the \$2 billion to \$3 billion to spend on this program at this time. I do not believe the conferees can take that much out of existing active-duty accounts to pay for this. At this point, it is unwise. What we need to do is continue to study this matter. I chair that subcommittee, and we can talk about it and come back with priorities that benefit all reservists in a fair and equitable way and fund those expenditures.

I yield the remainder of my time to the Senator from South Dakota.

Mr. DASCHLE. I will use my leader time, but I thank the Senator from Alabama for his kindness.

Let me thank and congratulate all Members who have had so much to do with offering this amendment—Senator GRAHAM of South Carolina, Senator DEWINE, Senator LEAHY, and so many others who have made this effort over the course of the last several months.

The distinguished Senator from Alabama said we need to think this through. This has been the subject of a great deal of study. The GAO has studied it; various economic analyses have been done on it.

There are three numbers I call to my colleagues' attention. The first is 700. There has been a 700 percent increase in the utilization of Guard and Reserve in active-duty and law enforcement roles since September 11—700 percent. The dislocation caused by that new role has been remarkable in all of our States. We are asking them to be law enforcement officers. We are asking them to be soldiers. We are asking them to fight in wars. We are asking them to play a role they did not play before.

The second number I ask my colleagues to remember is one-tenth of 1 percent. That is what the cost of this amendment would be, one-tenth of 1 percent of the Defense Department budget. We can afford one-tenth of 1 percent to say to all of those Guard and Reserve personnel: You are playing a role; you have never played a role before by seven times.

Now we are going to give them the chance just to purchase health insurance. That is all they are going to do, purchase TRICARE insurance. We are not going to give it to them, but we will let them purchase it.

The final number is this: 30; there is a 30 percent uninsured roster right now among the National Guardsmen who are under 30. Thirty is an important threshold. We have a vast number of people we have called upon to serve

their country in war and in peace, in roles involving National Guard, as well as in the military. All we are saying through this amendment is: You have a chance to buy health insurance, so you can do it better. And when you do it, you are going to be healthy.

I urge my colleagues to support this amendment.

The PRESIDING OFFICER. All time having been yielded back, the question is on agreeing to the amendment.

Mr. DASCHLE. I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

There is a sufficient second.

The clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. McCONNELL. I announce that the Senator from Nevada (Mr. ENSIGN) and the Senator from Ohio (Mr. VOINOVICH) are necessarily absent.

Mr. REID. I announce that the Senator from Florida (Mr. GRAHAM), the Senator from Hawaii (Mr. INOUE), and the Senator from Massachusetts (Mr. KERRY) are necessarily absent.

I further announce that, if present and voting, the Senator from Massachusetts (Mr. KERRY) would vote "aye".

The PRESIDING OFFICER. Are there any other Senators in the Chamber desiring to vote?

The result was announced—yeas 85, nays 10, as follows:

[Rollcall Vote No. 185 Leg.]

YEAS—85

Akaka	DeWine	Lieberman
Alexander	Dodd	Lincoln
Allen	Dole	Lott
Baucus	Domenici	Lugar
Bayh	Dorgan	McCain
Bennett	Durbin	McConnell
Biden	Edwards	Mikulski
Bingaman	Enzi	Miller
Boxer	Feingold	Murkowski
Breaux	Feinstein	Murray
Brownback	Fitzgerald	Nelson (FL)
Bunning	Frist	Nelson (NE)
Burns	Graham (SC)	Pryor
Byrd	Grassley	Reed
Campbell	Gregg	Reid
Cantwell	Hagel	Roberts
Carper	Harkin	Rockefeller
Chafee	Hatch	Sarbanes
Chambliss	Hollings	Schumer
Clinton	Hutchison	Shelby
Cochran	Inhofe	Smith
Coleman	Jeffords	Snowe
Collins	Johnson	Specter
Conrad	Kennedy	Stabenow
Cornyn	Kohl	Stevens
Corzine	Landrieu	Talent
Crapo	Lautenberg	Leahy
Daschle	Leahy	Wyden
Dayton	Levin	

NAYS—10

Allard	Nickles	Thomas
Bond	Santorum	Warner
Craig	Sessions	
Kyl	Sununu	

NOT VOTING—5

Ensign	Inouye	Voinovich
Graham (FL)	Kerry	

The amendment (No. 696) was agreed to.

Mr. REID. Mr. President, I move to reconsider the vote.

Mr. LEAHY. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. Without objection, the underlying amendment, as amended, is agreed to.

The amendment (No. 689), as amended, was agreed to.

The PRESIDING OFFICER. The Senator from Virginia.

Mr. WARNER. Mr. President, we accept the expression of the will of the Senate on this matter. I had the difficult position to oppose it, which I did.

As we look toward the benefits for the Guard and Reserve, they are deserved, richly, in most instances, but there is a balance that is somewhere not clearly definable between what we do for the regulars and what we do for the Guard and Reserve. If it gets out of balance, we could precipitate a bit of civil strife between these two magnificent categories of men and women who proudly serve in the uniform for our country and carry out their duties side by side on the battlefield and here at home. We will move on.

It is my intention to carefully consider this amendment, which was strongly adopted by the Senate, in the context of the overall bill and such other amendments in the House and the Senate as may contribute to the benefit of the men and women of the Armed Forces.

I yield the floor.

The PRESIDING OFFICER. The Senator from California.

AMENDMENT NO. 715

Mrs. FEINSTEIN. Mr. President, I send an amendment to the desk on behalf of Senator KENNEDY and myself, and we are joined by Senators FEINGOLD, DAYTON, and STABENOW.

The PRESIDING OFFICER. Without objection, the pending amendment is set aside. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from California [Mrs. FEINSTEIN], for herself, Mr. KENNEDY, Mr. FEINGOLD, Mr. DAYTON, and Ms. STABENOW, proposes an amendment numbered 715:

(Purpose: To strike the repeal of the prohibition on research and development of low-yield nuclear weapons)

Strike section 3131.

Mrs. FEINSTEIN. Mr. President, I think the Senator probably knows this would strike the Spratt-Furse language.

Mr. WARNER. Mr. President, we understood a number of Senators were going to introduce it.

Mrs. FEINSTEIN. I was 12 years old when the Enola Gay went out of the Pacific. I remember that big mushroom cloud on the San Francisco Chronicle and then, for months afterward, I remember the pictures that came back from Hiroshima and Nagasaki. It may well be that we are too far removed from that day to really understand the repercussions of what this bill is going to begin to allow to happen in the United States. What is going to be allowed to happen is a reopening of the door to nuclear development which has been closed for decades.

This amendment would strike section 3131, and that is the repeal of the

Spratt-Furse language which prohibits the development of so-called low-yield nuclear weapons. This prohibition of nuclear development was adopted in the 1994 Defense authorization bill. It has been the law of the land for the last decade.

The language of Spratt-Furse—I would like to read it—says that with respect to U.S. policy, "it shall be the policy of the United States not to conduct research and development which could lead to the production by the United States of a new low-yield nuclear weapon, including a precision low-yield warhead. The Secretary of Energy may not conduct or provide for the conduct of research and development which could lead to the production by the United States of a low-yield nuclear weapon which, as of the date of the enactment of this act, has not entered production."

And then it has a section on the effect on other research and development, and it says that nothing in this section shall prohibit the Secretary of Energy from conducting or providing for the conduct of research and development necessary to design a testing device that has a yield of less than 5 kilotons; secondly, to modify an existing weapon for the purpose of addressing safety and reliability concerns, or, three, to address proliferation concerns.

President Bush is right when he says the greatest threat facing the United States lies in the global proliferation of weapons of mass destruction and terrorist access to these weapons. But by adopting a new approach to national security in the wake of 9/11 that stresses unilateralism and preemption and increases U.S. reliance on nuclear weapons, I am deeply concerned that this administration may actually be encouraging the very proliferation we seek to prevent.

This bill, left intact, clearly opens the door to the development of new nuclear weapons and will, if left as is, begin a new era of nuclear proliferation, as sure as I am standing here.

A couple of weeks ago, former Secretary of State Madeleine Albright talked with the Democratic Senate Caucus and she said something interesting. She said, in all of American history, there never has been a greater change in foreign policy and national security than between this administration and the last one.

Indeed, I deeply believe this bill places America at a crossroad in the conduct of foreign policy, and how we determine nuclear weapons policy will go a long way to determining whether we control nuclear proliferation or expand it. This bill will expand it. Let there be no doubt.

To my mind, even considering the use of these weapons threatens to undermine our efforts to stop proliferation. In fact, it actually encourages other nations to pursue nuclear weapons by emphasizing their importance.

For decades the United States relied on its nuclear arsenal for deterrence

only. In the symmetric world of the Cold War, we faced the Soviet Union with nuclear weapons and a conventional military that was stronger than ours. Nuclear weapons were used to deter not only a nuclear attack on our homeland but also a conventional attack against our allies in western Europe and Asia.

Today the Soviet Union is gone, but the world is not a safer place. Rather, we have seen new nuclear states emerge—India, Pakistan, and lately North Korea. As we continue to prosecute the war on terror, it should be a central tenet of U.S. policy to do everything at our disposal to make nuclear weapons less desirable, less available, and less likely to be used.

This bill will do exactly the opposite. Instead of ratcheting back our reliance on nuclear weapons, this administration is looking for new ways to use nuclear weapons and to make them more usable. Does anyone in this Chamber doubt that others will follow? I do not. The administration's Nuclear Posture Review, released in January of 2002, did not focus solely on the role of nuclear weapons for deterrence. It stressed the importance of being prepared to use nuclear weapons in the future. In fact, the review noted that we must now plan to possibly use them against a wider range of countries.

The Nuclear Posture Review said that we need to develop new types of nuclear weapons so we can use them in a wider variety of circumstances and against a wider range of targets such as hard and deeply buried targets or to defeat chemical or biological agents. And indeed, a few months after issuing the Nuclear Posture Review, President Bush signed National Security Presidential Directive 17, saying the United States might use nuclear weapons to respond to a chemical or biological attack.

In the past, U.S. officials have only hinted at that possibility. But this administration has made it formal policy. In doing so, it has telegraphed the importance of nuclear weapons and the administration's apparent willingness to use them.

In the legislation before us today, there is language requested by the administration asking Congress to repeal the Spratt-Furse provision—a decade old law that bans research on weapons with yields of 5 kilotons. Now, that is a third the size of the bomb used at Hiroshima.

I believe Spratt-Furse is an important prohibition with positive security equities for the United States. Since it has been in effect, no nation has developed lower yield nuclear weapons.

This administration wants to repeal Spratt-Furse for one reason, and one reason only: to build new nuclear weapons, particularly for missions against the hardened bunkers that rogue states may be using to store chemical and biological weapons.

By seeking to build nuclear weapons that produce smaller explosions and de-

velop weapons which dig deeper, the administration is suggesting we can make nuclear weapons less deadly. It is suggesting we can make them more acceptable to use. But there is no such thing as a clean nuclear weapon that minimizes collateral damage.

Consider the following facts: According to a Stanford physicist, Sidney Drell, destroying a target buried 1,000 feet into rock would require a nuclear weapon with the yield of 100 kilotons. That is 10 times the size of the bomb dropped on Hiroshima.

According to Dr. Drell, even the effects of a small bomb would be dramatic. A 1-kiloton nuclear weapon detonated 20 to 50 feet underground would dig a crater the size of Ground Zero in New York and eject 1 million cubic feet of radioactive debris into the air.

According to models done by the Natural Resources Defense Council, detonating a similar weapon on the surface of a city would kill a quarter of a million people and injure hundreds of thousands more.

So there really is no such thing as a "usable nuclear weapon."

Moreover, nuclear weapons cannot be engineered to penetrate deeply enough to prevent fallout. Based on technical analysis at the Nevada Test Site, a weapon with a 10-kiloton yield must be buried deeper than 850 feet to prevent spewing of radioactive debris. Yet a weapon dropped from a plane at 40,000 feet will penetrate less than 100 feet of loose dirt and less than 30 feet of rock.

Ultimately, the depth of penetration is limited by the strength of the missile casing. The deepest our current earth penetrators can burrow is 20 feet of dry earth. Casing made of even the strongest material cannot withstand the physical forces of burrowing through 100 feet of granite, much less 850 feet.

In addition, the United States already has a usable nuclear bunker buster, the B61-11, which has a "dial-a-yield" feature, allowing its yield to range from less than a kiloton to several hundred kilotons. When configured to have a 10-kiloton yield and detonated 4 feet underground, the B61-11 can produce a shock wave sufficient to crush a bunker buried beneath 350 feet of layered rock. We have the weapons to do the job. We don't need another.

But the U.S. military, the strongest and most capable military force the world has ever seen, bar none, has plenty of effective conventional options at hand designed to penetrate deeply into the earth and destroy underground bunkers and storage facilities.

Those conventional bunker busters range in size from 500 to 5,000 pounds, and most are equipped with either a laser or GPS guidance system. A 5,000-pound bunker buster like the Guided Bomb Unit 28/B is capable of penetrating up to 20 feet of reinforced concrete or 100 feet of earth. It was used with much success in Operation Enduring Freedom in Afghanistan.

Other conventional bunker busters were used to take out Saddam Hus-

sein's underground lairs in Operation Iraqi Freedom. In fact, the U.S. military possesses a conventional bunker buster, the GBU-37, which is thought to be capable of taking out a silo-based ICBM. With this conventional arsenal at our disposal, there is little military utility that a low-yield nuclear weapon provides to the U.S. military.

While I agree that nuclear weapons may have some military utility in certain circumstances, the benefit of the development of new mini-nukes appears to me to be far outweighed by the costs. But with the sought-for repeal of Spratt-Furse, the administration seems to be moving toward a military posture in which nuclear weapons are considered just like other weapons—in which their purpose is not simply to serve as a deterrent but as a usable instrument of military power, like a tank, a fighter aircraft, or a cruise missile.

But there are several things wrong with that logic. Nuclear weapons are different.

First, using them—even small ones—would cross a line that has been in place for 60 years. If the Spratt-Furse prohibition is repealed, the development of new nuclear weapons could lead to the resumption of underground nuclear testing in order to test the new weapons. This would overturn the 10-year moratorium on nuclear testing and could lead other nuclear powers, and nuclear aspirants, to resume or start testing, actions that would fundamentally alter future nonproliferation and counterproliferation efforts.

I understand Secretary of State Powell has written a letter supporting this, and I must express my profound disappointment. I must restate something he said last year on "The NewsHour With Jim Lehrer." I quote Secretary Powell:

I mean, the thought of nuclear conflict in 2002, with what that would mean with respect to loss of life, what that would mean to the condemnation—the worldwide condemnation—that would come down on whatever nation chose to take that course of action, would be such that I can see very little military, political, or other kind of justification for the use of nuclear weapons. Nuclear weapons in this day and age may serve some deterrent effect, and so be it; but to think of using them as just another weapon in what might start out as a conventional conflict in this day and age seems to me something that no side should be contemplating.

This was 1 year ago. What has changed, Mr. President? Why would we open the door to nuclear development at the very time we are trying to say to North Korea this is unacceptable, at the very time we are worried as to whether Pakistan can securitize its nuclear weapons, and whether there may be a nuclear holocaust between Pakistan and India?

I have never been more concerned about where this Nation is going than I am today. Let me give another example. China has a no-first-use nuclear policy. Their warheads have been stable at between 18 and 24 ICBMs. Yet we

have a policy document, the Nuclear Posture Review, that says we would countenance a first use of nuclear weapons against China if they were to use military action against Taiwan, and we said the same thing about North Korea going into South Korea. This is in writing.

Does no one think anybody reads these things? Does no one believe that we do not set the tenor of the world with respect to weapons? We are the largest weapons seller on Earth, and I do not want to see us develop more nuclear weapons, nor do I believe the American people want to see it either. This bill allows that to happen.

I do not believe this side of the aisle can sit by and let it happen to our children and our grandchildren. Tactical nuclear weapons in the most sophisticated military in the world should play no part.

I cannot think of a single issue that should more define the political agenda today than whether the United States should go back into the nuclear business again, and repeal of Spratt-Furse is the first step in that direction.

In the Energy Committee, I suspected this was coming, and I asked Secretary Abraham: Are there any plans? He said no. Last Wednesday, in Defense Appropriations, I asked Secretary Rumsfeld what is going on. He said: Oh, it is just a study. Just a study, baloney. Does anyone really believe that?

The repeal of Spratt-Furse opens the door for America to begin to develop nuclear weapons again, and I for one do not believe we should sit by and see that happen.

We are telling others not to develop nuclear weapons. We are telling others not to sell fissile materials. We are concerned when North Korea has plutonium and uranium and Iran begins to start up refining uranium. Yet it is all right for us to go out and begin to develop weapons that are one-third the size of the weapon that hit Hiroshima and killed instantly 175,000 people? I do not think so. And I do not believe that is what the American people stand for either.

This is a big vote. This is a vote that opens the door. How we can repeal language that says to all the world the United States is not in the nuclear development business, I do not know, but I find it absolutely chilling and even diabolical, particularly when we preach to other nations.

At a time when we brand as evil certain countries based in part on their pursuit of nuclear arms and weapons of mass destruction, we must be careful how we consider our own options and our own contingencies regarding nuclear weapons. So I urge my colleagues to think very carefully about the implications this defense bill is going to carry throughout the world.

The 10-year old prohibition on study, on testing, and on developing nuclear weapons is going to be thrown out the window, and it is a major signal that

the United States is going to get back into the nuclear arms business.

I urge this Senate to join Senator KENNEDY and I in support of this amendment. I yield time to Senator KENNEDY, as much time as he requires.

The PRESIDING OFFICER. The Senator from Massachusetts.

Mr. KENNEDY. I thank the Chair.

Mr. President, over the past years, we have had the opportunity to consider the Defense authorization bill, and a number of extremely important weapons systems have been debated on the floor of the Senate. By and large, over that period, we have seen the results in our military.

All of us recognize the extraordinary performance of our military in these past weeks where they performed with, first, extraordinary courage; second, with extraordinary leadership; and third, with the latest and the best of technology. I think all of us want to make sure those are the items which are going to be there for the security of our military. They are going to be the best trained, best led, and best equipped with the latest technology.

We ought to consider the various proposals that are before us and ask what is the military significance of any of the matters we are asked to consider on the Defense authorization bill. It is against the background that the Senator from California has pointed out that we ought to examine what is the possible need for this kind of a weapons system and another opening of the debate on the testing of nuclear weapons.

Make no mistake about it, we may hear that all we are interested in is the design of the nuclear weapon, but we will come back to that because it is the clear intention of the administration to move ahead with not only the design but also the testing of nuclear weaponry.

We have to ask: How does that affect our national security? How does that affect our national defense? First of all, we ought to be asking ourselves, given the fact that our Armed Forces were in battle over the past weeks, resulting in an enormous success: What came out of that conflict that would make us take this step of lifting the ban on any kind of nuclear test? What happened in Iraq? What was the objective? What was the military objective in Iraq that would make us say what we want to do on the Defense authorization bill is move us back from the successful negotiations over the last 50 years of Republican and Democratic Presidents in moving us away from nuclear proliferation and moving us away from the possibility of nuclear confrontation? That is what the record has been over the last 50 years under Republican and Democratic Presidents alike.

The Senator from California has reviewed that. We remember times when we came dangerously close—I certainly do—in the Cuban missile crisis to the real possibilities of nuclear conflict and nuclear exchange which effectively

would have annihilated the United States and the Soviet Union as we knew it. It came dangerously close, and since that time Republican and Democrat leaders have said, OK, we do not want to see an escalation of the nuclear arms race. We have seen step after step to contain it. One of the most important ways of containing it is to have a moratorium on testing and also to have a battle against the proliferation of weapons.

What we have with this administration is basically an effort to lift what they call the Spratt amendment, which is a prohibition for research and development into the nuclear weapons. One can call them mini nukes. One can call them small nukes. Basically, I call them low-death weapons because that is what they are. We are talking about the killing of thousands of individuals with these weapons systems, and the administration is attempting to open this whole process again.

Over the period of the last 5 years we have not had any testing of nuclear weapons by India or by Pakistan, two nuclear powers. We have not seen any testing either by the United States, Russia, or China probably for the last 15 years. Progress was being made. We have seen five countries that have basically gone nonnuclear, basically renounced their nuclear weapons in the world. We have been making real progress.

What do we hear from the other side? We are living in a dangerous world. Well, I hope on the other side they are going to be able to tell us how nuclear weapons are going to solve the problem of dealing with al-Qaida, how nuclear weapons would have solved our problem in dealing with the threats in Morocco this week or Saudi Arabia, for example, the last week.

What do they intend to do with these nuclear weapons? Well, we hear maybe they can be used in our new, dangerous world to deal with the problems of biological and chemical weapons.

Have my colleagues read the reports on what would happen if we have nuclear weapons incinerating large storage spaces of gas or chemical weapons, and if those were to fractionate into the air in terms of critical masses, the amount of devastation and death that would mean to thousands or tens of thousands of troops if they were near or hundreds of thousands of civilians who were near?

What is the singular purpose? What is the military necessity? What do the Joint Chiefs want to do with this weapons system?

We will hear the other side say, let's not get all worked up about this because all we are trying to do is some research on this issue.

Listen to what some of the principal spokespeople for the administration say about that. In February, the Pentagon's Deputy Assistant Secretary for Nuclear Affairs, Fred Celec, was asked: What would happen if a nuclear bomb could be developed that would crash

through rock and concrete and still explode?

He said: It will ultimately get fielded.

And you are talking about all we are trying to do is a little research in this area? Come back to us later on; we will come back and talk to you if we are really going to get into testing of nuclear weapons.

This is what the head of the nuclear affairs weapons system at the Pentagon said: It will ultimately get fielded.

Then we go to Linton Brooks, who is the administration's nuclear weapons chief at the Department of Energy, who said the same thing to the Armed Services Committee in April: I have a bias in favor of the lowest usable yield because I have a bias in favor of something that is the minimum destruction. I have a bias in favor of things that might be usable.

There he is, Linton Brooks, the administration's nuclear weapons chief at the Department of Energy. Come on, now. You are talking about we are just going to do a little research and then we will come back and talk to you? Do you think our friends and adversaries around the world are going to believe that is what is going to happen in the United States? They will read those statements and they will start their programs of testing. That is what we are risking.

For what? We still have not heard from the military as to what it is our conventional bombs cannot do. What is it that our conventional artillery cannot achieve and accomplish? Where were their failings? Where is the potential target out there somewhere in the world? It was never told to us in the Armed Services Committee. It was never revealed to us in the Armed Services Committee.

Nonetheless, we want to find out if we want to go ahead—with all of the potential dangers that we know in terms of the dangers of proliferation of weaponry and the dangers from testing.

We have the administration's own Nuclear Posture Review in January of last year outlining the plans for developing new nuclear weapons, including improved weapons and warheads that reduce collateral damage. Do you know what that means in layman's language, reduced collateral damage? That means these smaller nuclear weapons. That is what it means.

Now, let us look at what these low-death weapons—I call them low-death weapons—could do. We have seen the administration talk about not exploding them even in their testimony before the Armed Services Committee. They refused to rule out the use of any nuclear weapons in the battle with Iraq; although Tony Blair did, our Secretary would not.

Well, now we have the 5-kiloton, earth-penetrating nuclear explosion. This chart depicts the average wind patterns for a winter day in the Middle

East. It depicts a hypothetical attack outside of Damascus, Syria, using the nuclear weapon with a yield of 5 kilotons. The threshold of this ban exploded at a depth of 30 feet. This is the level, approximately 50 feet. This is at 30 feet.

This blast would cause 230,000 fatalities and another 280,000 casualties from radiation exposure within 2 years of the blast.

This is a plume pattern developed by the Defense Threat Reduction Agency computer model. We are talking about tens of thousands—hundreds of thousands—of casualties. That is what we are talking about with this weapon system.

What is the challenge? Are we finding that the Russians are building up to develop this kind of capability? No, we have not heard that. Have we heard the Chinese are now trying to build up their capability somehow to be a threat to us? No, we have not heard that. Have we heard the Pakistanis are going to do it? No. The Indians are going to do it? No, we have not heard they are going to do it. They have actually complied with the test ban treaties by not having any explosions, and they have been working with us in terms of the reduction. Certainly the Russians have in terms of reducing the total number of nuclear weapons.

We stood on the floor and passed an agreement with Russia not many weeks ago. So what is out there? What is out there that is going to put us on the track toward the reassumption of nuclear testing? What is the threat to us today?

It seems to me we do live in a dangerous world, with what is called al-Qaida. Everyone in the United States understands it, if they read the newspapers in the last few days and they see what has happened in the Middle East and what has happened in Morocco. We have to ask ourselves: How in the world will this particular weapon system help us deal with that particular threat? That reason has not been made.

The reason for this weapon system other than, well, let's take a chance, we can move ahead, it will be nice to add this to our stockpile, add one more weapon system, seems to be the argument. We have the possibility of going ahead; why not go ahead and do it.

I don't hear the other questions being raised about the range of activities that are going to take place in countries around the world. Make no mistake, this will release a chain of reactions across this world in nuclear testing. On the one hand, the United States says, look, we are trying to negotiate with the North Koreans in order to reduce the possibilities of nuclear exchange and miscalculation on the Korean peninsula. But do not pay attention to what we do. We are going over here to develop some new nuclear weapons. How does that work? What kind of message does that send in this world today? Who will buy that? Maybe those who support it are going to say

how that kind of activity has worked in the recent past, how that kind of threat has resulted in other countries being cowed and intimidated into laying off on that. It will be the contrary.

Now, should these systems ever need to be developed, other colleagues want to speak about what the dangers would be, as to the possibilities of terrorists being able to purloin, steal, a small weapon system and being able to use that more effectively. We all know it is enormously complicated and difficult for them to do it today—not an impossibility—and we are realistic in terms of trying to do more to make sure that is done, but there is a whole range of additional threats by smaller systems that can cause devastation to hundreds of thousands of people.

Finally, we see what this administration will do; they will deploy the dangerous nuclear weapons. They could be developed to penetrate, according to their Deputy Assistant Secretary of Defense for Nuclear Affairs, Linton Brooks: "I have a bias in things that might be usable."

And there is the administration's nuclear policy review that indicates deployed warheads reduce collateral damage. That is what we are talking about. This is a matter of enormous risk.

If this risk were balanced by the danger, sign me up. But that case has not been made. This would be a remarkable step backward from the firewall established going back to GEN Eisenhower, all the way through, a firewall between conventional and nuclear.

This administration, this policy, will break that down. It is wrong. It is not in our national security interests. That ought to be the test. This fails to meet that test.

I hope our amendment is acceptable. The PRESIDING OFFICER (Mr. CRAPO). The Senator from California.

Mrs. FEINSTEIN. I ask unanimous consent that Senator REED from Rhode Island be added as a cosponsor, Senator DURBIN of Illinois, I believe Senator DAYTON already is, and Senator BINGAMAN, as well.

The PRESIDING OFFICER. Without objection, it is so ordered.

The Senator from Alabama.

Mr. SESSIONS. Mr. President, this is an issue we have considered in the Armed Services Committee, of which I am a member. I note it passed on a vote of 15 to 10 with bipartisan support.

I hear the opponents to this amendment using words such as "these matters should not even been contemplated." "We should not even think about a new type of nuclear weapon that may be less dangerous, have less collateral damage than the ones we already have. That is not where the United States should be."

I note for my colleagues, the cold war approach to life has changed. We are in a new world environment. We need to be thoughtful about how we go forward. We should not shut off any study, any evaluation, of nuclear weapons in what we might need in the future, what

would be better, what could create peace in a more effective way than the current armament system we have.

They say if we do anything, if we study, if we go out and do any research, if we even think about what other nations might be doing, we can no longer encourage countries not to proliferate their weapons. I don't think so.

What is happening now? They say Pakistan, they talk about India, Korea, Iran, and other countries that are, in fact, working on nuclear weapons. They are doing that now, are they not? Aren't they doing that right now, this very minute? The fact we have not done any research or development or built any weapons in over a decade, I suppose, how has that had any impact on what they decide to do? These countries make decisions on what they think might be in their best interest. We have to work with them and encourage them not to do certain things.

If a lot of countries around this world—a lot of them are our Allies like Japan—if they felt we did not have an adequate military capability or option or weapon system that would allow us to effectively defend their interests, they may decide they have to have nuclear weapons, too. The United States has a peacekeeping role in the world. It is a high calling. It requires us to be very thoughtful. We cannot exercise blind fear about the world we are in and the technology that is out there and what is going to happen.

A lot of people may not know, of all the nuclear powers in the world, this country is the only one incapable at this moment of building a new weapon. We do not have the capability at this point to build new weapons. Despite that, the President has called for a reduction in our nuclear stockpile by one half or more. We are in an unprecedented reduction in the nuclear capability of this country, removing thousands of weapons from our inventories. However, we do not need to stick our head in the sand. We do not need to assume other countries are not out there studying nuclear weapons and will study nuclear weapons whether we study nuclear weapons. That is silly. That has no logical basis.

Think about it. Whether we have a laboratory somewhere that is studying nuclear weapons, this is going to determine whether Kim Jong Il decides to build new weapons? Whether Iran or China decides to build more weapons? No sir, not at all. That makes no sense whatever.

We have had smaller weapons in the past. They have been removed from stockpiles. I don't think that destabilized the world during that period.

They say, well, even though we are reducing our stocks by half, even though we have no weapons program, even though we are not doing nuclear testing, it is our fault. We are somehow destabilizing the world. We are causing Kim Jong Il to create weapons. I don't think it is our fault. I am not part of the "blame America first" crowd. Any-

one wants to go to the DMZ up there and look into that depraved country of North Korea, stand in that wonderful, free, progressive country of South Korea, and see what he has done to the people of North Korea and has no moral rejection of him and his would-be empire, his regime, and has no sense of compassion for the people he oppresses, and now we are going to blame ourselves for his misbehavior? And we are sending him food to feed his own people because he cannot raise the food to do so? I don't think so.

I believe this country has a moral responsibility to lead in this world and we will not be an effective leader if we don't maintain leadership in all forms of weaponry—yes, including nuclear weaponry. It is just that simple.

I hope we do not have to develop any new systems, but I don't see anything wrong with doing some research. We might learn what others are doing out there, too, and that might be important to our national defense.

We are the premier nuclear power in the world—premier power in general and the premier nuclear power in the world. If we ever got to the point where we had some smaller weapons, why would that make the world more dangerous than the big ones we have, let me ask you? I think that is not where we need to be heading. We need to be rational about where we are. Nuclear power remains a part of our arsenal. A growing number of nations around the world, as they have been from time to time since nuclear power became available, are studying ways to develop their own nuclear power.

They say we can't use it against al-Qaida. Maybe we can, maybe we can't. Probably we would not use a nuclear weapon against a group like al-Qaida. But who would have thought we would have been at this level of conflict in Afghanistan or Kosovo or Bosnia 15 years ago? Who knows what the future may bring? A great nation, a great Congress, who has a responsibility to protect and defend this Constitution and this Nation, should be thinking ahead to make sure we have the capability, as time goes by, to deal with any threat that faces us. To do otherwise would be irresponsible.

Let's be clear about this. This amendment we passed 15 to 10 in committee does not authorize building small weapons. It does not authorize testing weapons. It talks about study and research. If any step further than that has to be taken, this Congress would explicitly have to approve it. Then we can hear these debates about whether or not we want to go forward, depending on what the state of the world is at that time.

I used to be a Federal prosecutor. As I understand the law, it would be a crime to utilize the language in this bill to build one of these weapons or to test one of these weapons because it would not be authorized in law. You cannot use money appropriated by Congress for things not authorized. This

language does not authorize testing. It does not authorize building of a nuclear weapon.

We have also to be concerned in this age of increasing knowledge about nuclear power, with the increasing ability through technology and other capabilities to transmit that knowledge around the world. We ought to be aware that others could step forward and make breakthroughs in nuclear power that could in many ways undermine the leadership we have in the world today. We do not need to have other nations studying nuclear power, nuclear weaponry, and us not.

Think about this. We have cut our power down substantially. We are cutting down the number of our weapons very substantially—half or more than half. We absolutely cannot make a commitment that we will never do anything else in the future. That would simply set out a marker that would be the goal any nation could seek to attain and then they would be on equal power with the United States of America militarily, in terms of nuclear weapons. We should not do that.

We need to make it clear to the entire world we care about peace, we care about world harmony, but we will not allow our Nation to be vulnerable to attack because our Nation—I can say it with confidence—our Nation stands for peace, prosperity, trade, and freedom in this world. That is what we stand for. A lot of nations don't. If somebody in this body is not capable of making that value judgment, then I think they need to go back and study their history a little bit. So we can stand for right in this dangerous world; we simply have to be militarily strong.

Americans expect us to be thinking about it and going forward. President Bush supports this amendment that passed with bipartisan support in the committee. Secretary of State Powell supports this amendment, as do Admiral Ellis and General Jumper, two of our key military people who deal with these issues.

I simply think it would be irrational to prohibit research that could inform future decisions as to whether such weapons would enhance the national security of our country. It would not prejudice our Congress to decide these questions in the future. Let us not fear greater knowledge that would inform our future decisions. Let's make sure this Nation does not have its head in the sand. Let's make sure our Nation is alert to what our capabilities are, what our enemies' capabilities are, and to the need for change if that need arises. I think that is the right approach. I think that is why the Armed Services Committee sent this amendment to the floor as part of this bill.

I thank Senator WARNER for his leadership. He has led us in this way, in a careful way. There is nothing extreme about this amendment. It is the right step at this time.

I yield the floor.

The PRESIDING OFFICER. The Senator from Illinois.

Mr. DURBIN. Mr. President, the Senate considers a myriad of topics. Every week those who follow our debates will hear us discuss far-reaching topics from the farm bill to a transportation bill to a tax bill, how to move the economy, how to deal with health care and education. All of those are critically important issues. But I cannot believe I have witnessed in my time on Capitol Hill a more historic debate than what we are undertaking at this moment.

We are literally talking about whether the United States will initiate a nuclear arms race again. Nothing I can think of meets this, in terms of gravity and its impact on the future of the world.

If I might, I would like to ask the ranking member of the Armed Services Committee, my colleague from the State of Michigan, if he would be kind enough, before I say a few words here, since he was in on the committee debate on this bill and understands what is included in it, if he would answer a couple of questions relative to this issue of nuclear weapons so we can put this debate in context.

Is it a fact, I ask the Senator from Michigan, without yielding the floor—is it a fact we are embarking on at least two dramatic changes in the policy of the United States of America toward research and building of nuclear weapons in this legislation?

Mr. LEVIN. The Senator is correct. There are at least two provisions here.

Mr. DURBIN. Would the Senator be kind enough to tell me, when we use the term low-yield nuclear weapons, is it not true these are weapons which have about one-third of the killing power of the nuclear weapon used, the atomic bomb used in Hiroshima which killed, in a matter of seconds, 140,000 people? Is that true?

Mr. LEVIN. The Senator is correct. The so-called low-yield weapons indeed are about one-third the power of the weapon that was used at Hiroshima.

Mr. DURBIN. Could the Senator from Michigan tell us how we are changing our policy in relation to the building or research on these types of low-yield nuclear weapons?

Mr. LEVIN. Under the law that exists today, the so-called Spratt-Furse language which exists in law today, there is a prohibition on research and development which could lead to the production of a so-called low-yield weapon. Under the bill, that language would be stricken from the law and there would be no such prohibition.

Mr. DURBIN. Could the Senator also tell me in relation to even more powerful nuclear weapons, the so-called bunker busters—which name, I think, does not do justice to the gravity of the weapon, the severity of the weapon we are considering—I am told by some these weapons have detonation power up to 70 times the power of the bomb we dropped on Hiroshima. Could the Senator from Michigan tell me, in terms of developing and building these new doomsday weapons, 70 times more

powerful than the bomb dropped on Hiroshima, what does this bill do?

Mr. LEVIN. The so-called bunker busters, which is a total misnomer in my book because these are city busters—they may indeed be nation busters or world busters, but nevertheless the so-called bunker busters are two weapons. There is a so-called B-61 weapon, which is about the power of 28 Hiroshimas, and the other one is the B-83, which is up to 71 Hiroshima weapons, in terms of power.

Mr. DURBIN. If I could put that in context, if the bomb in Hiroshima killed 140,000 people instantly, can the Senator even calculate how many people may be casualties from the largest nuclear weapon which is envisioned by this new piece of legislation?

My calculations are that up to 9 or 10 million people could be killed with that type bomb.

Mr. LEVIN. I don't have a calculator. Whatever 140 times 70 would amount to would be that number, assuming the same approximate density in Hiroshima.

Mr. DURBIN. I thank the Senator from Michigan for his diligent work on this committee.

Consider the gravity of this debate. Consider for a moment what we are embarking on if we accept President Bush's vision and the administration's vision of the future of America and the world. We have just come off a war in Iraq—a war which once again proved decisively the strength of the American military. We have a military operation without peer in the world, the very best in skill when it comes to men and women in uniform, and the best technology on Earth. We spend upwards of \$400 billion a year and more to develop this weaponry and this national defense. When called upon as in Iraq, as in the Persian Gulf, and so many other times, they have shown they are decisive in their goals. Frankly, there is nothing on Earth to match it. I don't think there was a moment in the invasion of Iraq when people said, If we just had another weapon, perhaps this would go more smoothly. Within 3 weeks, we conquered that nation. We brought to bear a dictator and his army. No one ever questioned that we have the most powerful military in the world prepared to do that.

What the Bush administration tells us is it is not enough. Whatever conventional weaponry we own, it is not enough when we consider the future of the world; and we, as the United States, need to move forward, as the Senator from Michigan has told us, to develop so-called "low-yield nuclear weapons"—these compact nuclear weapons and these bunker buster nuclear weapons some 70 times the power of what was detonated in Hiroshima. I think this is a dramatic departure in American foreign policy.

I agree with the Senator from California and thank her for her leadership in offering this amendment, which I co-sponsored with the Senator from Massachusetts.

I hope my colleagues, despite their warm and strong feelings for the President and his administration, will pause for a moment and think about what we are doing today and the road and the course we are about to follow.

This bill is a declaration that the United States is prepared to launch a nuclear arms race in the world again—a nuclear arms race which is no longer the province of a handful of nations.

There was a time when ownership of a nuclear weapon reflected a prosperous country with great military capability. Look at North Korea today, as poor as they come, suffering from famine. This country is in the process of developing a new nuclear weapon every single month. To think that the United States could initiate a new nuclear arms race with our research and development and not see this replicated around the world in other countries is naive and wrong and dangerous. That is what is wrong with this proposal of the Bush administration.

I also ask my colleagues to put in context the Bush administration's overall view of foreign policy, which is a departure from 200 years of thinking in America. President Bush came to this office and said we will no longer wait for nations that are an imminent threat to the United States. Since 9/11, we need to change the strategy, and change the rules. We will now be engaged in preemption. That is, we will attack those countries which we think could be a threat to the United States. That is dramatic change. With that dramatic change, coupled with this change in policy, think about what we are saying to the rest of the world. Whether you are a threat to the United States, if we perceive you to be a threat to the United States, we can attack you. Whether you are a threat to the United States, if we perceive you to be a threat, we can use nuclear weapons in attacking you. And we are about to develop several new generations of nuclear weapons to do it.

Step back for a second, as any rational person would do, and ask, What does some other country in the world do in response to that? I know I am about to be attacked. Whether I threaten the United States, I have to be on guard. If I know they will use nuclear weapons, even if I don't, then what are you going to do? You are going to arm yourself to the teeth, as the North Koreans have done. Develop as many weapons as quickly as you can to let the United States know that if they use preemptive foreign policy and nuclear weapons in that preemption, there will be an answer coming back from that country. That is a recipe for a global arms race. There is no end in sight, if we allow that to occur. It is exactly what is being suggested by this policy.

The Senator from Alabama came to the floor and said we should be thinking ahead. That is why he supports this. I would say to the Senator I agree with him completely. We should be thinking ahead, and that is why we

should oppose this. The United States ought to make it clear we are not going to initiate any nuclear testing to develop new weapons, that we are not looking for a new generation of nuclear weapons, and that we, frankly, don't believe it makes for a stable and a peaceful world for other countries to develop these nuclear weapons either.

If we set an example with this new generation of nuclear weapons called for by this bill, how do we then turn to the rest of the world, and say, Stand in place, don't change, let the United States develop new nuclear, but you don't do the same? That isn't going to work. It is not rational. It doesn't show the kind of direct thinking I think we should ask from this administration and every other administration.

I support the amendment offered by my colleagues to strike the section of the bill that repeals the prohibition on R&D of low-yield nuclear weapons. This is calling for a study for the development of nuclear weapons.

Sadly, we know the spokesmen for the administration have made it clear that after one study they will be developed, in no uncertain terms. That, of course, is an invitation for a global arms race.

I ask unanimous consent to have printed in the RECORD a letter of May 19 of this year from several prominent scientists across the United States in support of this amendment.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

May 19, 2003.

DEAR SENATOR, As scientists and engineers with long experience on nuclear weapons and defense issues, we are writing to urge you to retain the Spratt-Furse law banning development leading to the production of nuclear weapons with yields of less than five kilotons.

There is no need for the United States to develop new low-yield nuclear weapons beyond those it has already developed and tested. Opponents of the law argue that the ban impedes exploration of nuclear weapons concepts for attacking deep underground targets and destroying chemical and biological agents. However, technical analysis shows that low-yield weapons would not be effective for these tasks. Low-yield earth penetrating weapons cannot burrow deep enough and do not have a large enough yield to destroy deep underground targets; moreover, the explosion would not be contained for even low-yield earth-penetrating weapons, and would necessarily result in large amounts of radioactive fallout. If a nuclear weapon was used to attack chemical or biological agents, it is far more likely that this would result in the dissemination of these agents rather than their destruction.

Moreover, the law does not restrict research and early development of low-yield weapons, and places no restriction at all on work on higher yield weapons. The law only prohibits later stages of development and engineering that are geared toward production of a low-yield weapon.

Some opponents of the law argue that maintaining expertise at the U.S. weapons labs requires weapons scientists to explore and develop new weapons concepts, and that ambiguities in Spratt-Furse law have had a "chilling effect" on such efforts. However, last week the House Armed Services Com-

mittee adopted an amendment that clarifies the wording of the law. We urge you and your colleagues to support such a clarification in the Senate to make clear that the ban permits research and early stages of development, while prohibiting the engineering and development of new low-yield nuclear weapons for deployment.

Arguments that low-yield weapons serve U.S. interests because they produce less collateral damage and are therefore more usable than high-yield weapons are shortsighted. Any use of nuclear weapons would demolish a firebreak that has held for nearly 60 years and would be a disaster for the world. The United States should be seeking to increase the barriers to using nuclear weapons, not decreasing them.

Moreover, it is counter to U.S. interests for the United States to pursue new nuclear weapons at a time when the highest U.S. priority is preventing other countries or groups from obtaining them. The perception that the United States is pursuing these weapons and considering their use would give legitimacy to the development of similar weapons by other countries, and would be an incentive to countries that are concerned they may be a target of such weapons to develop their own nuclear weapons as a deterrent.

The act of repealing this 10-year-old law would send a strong, negative message to the rest of the world about U.S. intentions with respect to maintaining the existing international moratorium on nuclear testing. If the pursuit of new low-yield weapons leads to the resumption of U.S. nuclear testing, this would inevitably lead to testing by other countries—thereby reducing U.S. security and undermining U.S. efforts to stop the spread of nuclear weapons.

Given the technical realities and limitations of low-yield nuclear weapons, as well as the likely security costs of developing new low-yield nuclear weapons, we urge you to retain the Spratt-Furse law.

Sincerely,

HANS BETHE,

Professor Emeritus, Cornell University.

SIDNEY D. DRELL,

Professor Emeritus, Stanford Linear Accelerator Center, Stanford University.

RICHARD L. GARWIN,

Philip D. Reed Senior Fellow and Director, Science and Technology Studies Program, Council on Foreign Relations.

MARVIN GOLDBERGER,

President Emeritus, California Institute of Technology.

JOHN P. HOLDREN,

Professor and Director, Program on Science, Technology, and Public Policy, Kennedy School of Government, Harvard University.

ALBERT NARATH,

Former Laboratory Director, Sandia National Laboratories.

WOLFGANG K.H. PANOFSKY,

Professor Emeritus and Director Emeritus, Stanford Linear Accelerator Center, Stanford University.

BOB PEURIFOY,

Former Vice-President, Sandia National Laboratories.

Mr. DURBIN. Mr. President, let me also say the policy implications of crossing the line toward the use of nuclear weapons and actually making them useful weapons argues most forcefully against developing such weapons.

I am particularly concerned that this administration's policy of preemption, combined with the policy of first use of nuclear weapons, is an incentive to proliferation of weapons of mass destruction, especially nuclear weapons.

Let me go back to the point made by the Senator from Massachusetts. The threat we face today is not a threat of nuclear power against the United States. It is a threat of terrorism. No one has rationally suggested that the development of these nuclear weapons can be used as a deterrent against al-Qaida and terrorism. How could our possession of even a low-yield nuclear weapon have stopped September 11? It could not have. We are dealing with asymmetrical power, to use a cliché which you find on Capitol Hill in most committee hearings involving the military. It just says you don't have to match the United States strength. You can find a vulnerability where you have the strength to inflict casualties and damage. That is what happened on September 11.

Otto Bismarck once said, "Preventive war is like committing suicide out of fear of death." I believe we should remember those words of wisdom.

Let me elaborate on a few points.

The September 17, 2002 National Security Strategy of the United States stated as a matter of self-defense that America will act against such emerging threats before they are fully formed to forestall or prevent such hostile acts by our adversaries. The United States will, if necessary, act preemptively.

When you put together a policy of preemption, a policy of first use of nuclear weapons, and a new generation of nuclear weapons, which this bill calls for, it does not make for a safer world. It is an invitation for a world of uncertainty and a world of danger we will be leaving our children.

I have watched this administration come forward with many proposals I disagree with. I cannot think of any proposal they have suggested which is more dangerous than what we are considering today.

For those who are following this debate, this is not another routine bill. This bill is about to discard 50 years of American foreign policy and 50 years of American nuclear policy. It is going into uncharted territory with a new approach which invites danger, retaliation, and proliferation. It will, in my mind, increase the likelihood of nuclear confrontation in the future.

I hope on a bipartisan basis the Senate will adopt the amendment offered by the Senators from California and Massachusetts.

I yield the floor.

The PRESIDING OFFICER. The Senator from Minnesota.

Mr. DAYTON. Mr. President, I wanted to say to the distinguished chairman of the Armed Services Committee, who suggested earlier that we alternate back and forth, even though there is no agreement, I would be more than happy to defer to someone on his side.

Mr. WARNER. Mr. President, I thank our colleague. I am perfectly contented and listening carefully to the debate. At the appropriate time I will make my remarks and then move to table. I

want to in no way inhibit the debate on this important subject. I feel very strongly a contrary form of view, as do a majority of the colleagues I know. We certainly witnessed in the Armed Services Committee a strong vote in favor of going ahead with this provision in our bill. I am respectful of the views of others, but I am mindful of what we did on the Committee on Armed Services in our vote on this issue.

Mr. DAYTON. Mr. President, if the chairman wants to wait, I will look forward to hearing his remarks. I have the greatest respect for him, and also many of my colleagues from the other side of the aisle who will offer their comments at a later time.

At the request of Senator FEINSTEIN, I ask unanimous consent that Senator JEFFORDS be added as an original cosponsor of the amendment.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. DAYTON. I am proud to rise with my very distinguished colleagues who have introduced this measure, Senator FEINSTEIN and Senator KENNEDY; they who have eloquently stated, along with the Senator from Illinois, the reasons why this drastic change in American policy is so ill-advised—to resume the testing, development, and deployment of nuclear bombs. That would put the United States back into the front of the world pack of nations now proceeding with nuclear weapons development. We should be leading the world in the opposite direction, to stop the future proliferation of nuclear bombs. We can't do both.

We can't tell other nations around the world not to build even a single nuclear weapon and then do it ourselves. We already have thousands of nuclear bombs. Yet we are going to tell other governments: You can't have even one.

We should be negotiating those agreements. We should prevent other nations that do not presently have nuclear weapons from developing them. We should negotiate agreements with North Korea, Iran, whereby they would stop and dismantle their nuclear weapons production in return for economic assistance, food, technological development, whatever it is we can do to improve their peaceful standard of living and help bring them back into the civilized world.

We should proceed to carry out the agreement which President Bush and President Putin reached over a year ago to consolidate and reduce the nuclear weapons which our two countries have. We should discuss with the new Chinese leadership their doing the same. We should redouble our efforts to track down and purchase and to lock up the nuclear weapons and materials that are loose from the old Soviet Union or from any other source, before they fall into the very dangerous hands of terrorist organizations which, if they get nuclear weapons, will use them against us. How can we do all that if we ourselves are developing our

own next generation of nuclear bombs? It is crazy. It is crazy to do it. And it is crazy to think that the rest of the world would stand idly by while we proceed to do so.

Why do we need to do this? We have the most overwhelming military force in the world, as we just demonstrated in Iraq. We have the greatest, most overwhelming military dominance of any nation in the history of the world over every other nation. We must maintain that overwhelming military superiority, and we will. President Bush has proposed increasing our military spending every year that he has been in office, and this Congress has provided him with every dollar he requested. I voted for every one of them myself.

We are now spending this year more money on our military strength than the next nine nations of the world combined. I agree with my colleague from Alabama who is properly vigilant about what other nations are doing. We do need to look ahead and make sure that we maintain the kind of superiority and dominance which we can then use to prevent nuclear wars or any kind of wars around the world. But we don't need those devices today, and we don't see anybody else in the world developing them. So we should be trying to stop it, not move it forward.

We don't need the so-called low-yield nuclear devices to win a war, not any war anywhere in the world and not for any time in the foreseeable future. Parenthetically, there is no such thing as a low-yield nuclear device. It is an oxymoron, low-yield nuclear device. There is only one description of these devices: They are nuclear bombs. They are nuclear bombs more powerful than the ones used in Hiroshima and Nagasaki 58 years ago. My understanding is that in terms of yield, in terms of radioactive fallout they may be more constrained, but in terms of the explosive power of these advanced weapons, they go beyond anything that was used in World War II, which is, as we recall, the only time in the history of the planet that nuclear bombs have ever been unleashed by one nation against another.

It is our responsibility as the leader of the world to assure that they are never used again. Nothing is more dangerous to our national security than the continued development and production and ultimately proliferation of more nuclear weapons anywhere in the world. The reality is we can't prevent their use once they are produced. We can try, and we have. And we will continue to do so. With treaties, through negotiation, we can build a national missile defense system as the President has proposed, as Congress has appropriated initial funding. But even if it could be made to work perfectly, a terrorist group could put a nuclear weapon in a briefcase or in a car's glove compartment and annihilate New York City or San Francisco or Mobile, AL, or Minneapolis, MN.

We can't prevent the use of one of these nuclear weapons once it has been produced, which is why we can and must stop their production before. We still have a chance to do that. We still have that opportunity, and that is what this administration's priority should be, to put an end to the nuclear arms race and those who want to enter it and to negotiate these agreements. But to do that, we have to set the example. We have to lead the world in the direction we want it to go.

We can't say, we are the exception; everybody else follow this set of rules, but we are different. We know that our intentions are honorable. We know that we would not use them inappropriately. But we are not viewed that way by anyone else, as we would not view anyone else that way. We have to lead by our actions as well as by our words.

As others have pointed out, if we were to do this now as we try to put the lid on other nations' development of their nuclear industry weapons industry, it would be catastrophic. In the eyes of the world we would look as though we don't really understand how we are viewed by them.

This is an historic opportunity. It is so critical that this administration, which has proven that it knows how to win wars with military might—that we have established—which they inherited from President Clinton's administration, shows that we know how to win the peace.

We know how to win the peace in Afghanistan, where our efforts to rebuild the country have been minimal, tragically, in the last year and a half compared to the scope of the need and the opportunity to showcase the American economic social system, our way of life, so that the people of that country can benefit, and people especially in the Arab nations can see the benefits and advantages of our system. We need to do the same in Iraq—seize control and security there and bring in the U.N. and other nations in efforts to bring that country over to a democracy and a stable government, encourage and assist their economic recovery, and negotiate with others.

That is the direction in which we need to go, but it is not the direction this administration is going, or cares to go, or knows how to go. It is the wrong signal to send to the rest of the world that we intend to proceed further down the path of our domination militarily and our use of weapons of any level of destruction in order to achieve future goals; and if we proceed in that direction, we must expect that the rest of the world will follow. That would be more dangerously destabilizing to this Nation and to the planet than anything I can imagine.

I yield the floor.

The PRESIDING OFFICER (Mr. CHAFEE). The Senator from South Carolina is recognized.

Mr. REID. Mr. President, we have a number of speakers who wish to speak on this legislation. I wonder if it would

be more orderly if we tried to arrange the time so that people—

The PRESIDING OFFICER. The Chair recognized the Senator from South Carolina.

Mr. GRAHAM of South Carolina. I am glad to yield to the Senator for a moment.

Mr. REID. I am sorry, I didn't know. We might be better off—we have a number of Senators waiting, so that there will be some order—I wonder how long the Senator from South Carolina is going to speak approximately.

Mr. GRAHAM of South Carolina. About 5 minutes.

Mr. REID. I am wondering if it would be appropriate, I say to my friend from Michigan, if we had one on our side, Senator BINGAMAN, for 20 minutes, and Senator FEINGOLD wishes 20 minutes, and Senator DORGAN wants 5 minutes. I am wondering—if there is someone from the Republican side who wishes to speak interspersed with ours, they would be allowed to speak.

I ask unanimous consent that following the statement of the Senator from South Carolina, Senator BINGAMAN be recognized for 20 minutes, and following him, the Senator from Wisconsin for 5 minutes, and then the Senator from North Dakota for 10 minutes.

Mr. LEVIN. Reserving the right to object, Mr. President, I just suggest two things: One, the interspersed order include Republican speakers, should they desire—

Mr. REID. That was part of the request.

Mr. LEVIN. Secondly, there will be additional speakers beyond that. I would not want to suggest that the debate would end then because we have additional speakers.

Mr. REID. Senator FEINSTEIN is here. She wishes to speak for a considerable period of time. We need to confer with the Senator.

Mr. LEVIN. Prior to that, Senator BYRD wanted to speak. I wanted to speak for 10 minutes, and Senator JACK REED of Rhode Island and Senator AKAKA want to speak as well.

Mr. REID. Why don't we lock these in?

Mrs. FEINSTEIN. I wish the opportunity to speak at the end for 1 hour.

Mr. REID. I say to my friend, a number of other people wish to speak.

Mrs. FEINSTEIN. At the end. If it is a unanimous consent agreement, I don't want to be cut off.

Mr. REID. You will not be cut off. This is just to line speakers up for an hour or so. There is plenty of time for debate after that.

Mr. GRAHAM of South Carolina. Reserving the right to object, what was the last thing the Senator said?

Mr. REID. Senator FEINSTEIN wanted to be protected for future time.

The PRESIDING OFFICER. Is there objection to the request?

Without objection, it is so ordered.

The Senator from South Carolina is recognized.

Mr. GRAHAM of South Carolina. Mr. President, I rise in opposition to the

amendment. As quickly as I can—a lot of people want to speak—I will frame the debate for those who are listening.

The Armed Services Committee was asked by the Pentagon to give some relief on a 10-year prohibition on research and development of low-yield nuclear weapons for a specific military purpose. The Pentagon and others tell us that the warfare of the future is going to have a component to it about which we need to be thinking.

As we have seen in Afghanistan, Iraq, and other places, the enemies of tomorrow and today have gone underground in a deep fashion—underground not only to hide their forces, but to hide weaponry and to potentially build chemical or biological weapons facilities, underground to develop hydrogen nuclear weapons, underground to protect their troops from the awesome power that we have today.

The committee, after listening to the Pentagon's request, in the bill we have before us, lifted the ban on research and development to allow the Pentagon to do research and development in this area as they could on any other weapons system.

The question becomes for the Senate, after having received input from our Department of Defense and those experts who are paid to follow such matters, whether saying no to their request to do research and development only is a wise decision.

My colleague who previously spoke mentioned the word "crazy." I think it would be incumbent upon us to listen, as the committee has done. And the committee, in a bipartisan fashion, after listening, voted to lift the ban on research and development, to go forward and look at the ability to combat the threats of the future by having a low-yield nuclear weapon that could go to the underground chemical or biological weapons factory that may exist in the future—to go to the underground nuclear weapons facility that may exist in the future.

As we have seen from Afghanistan and Iraq, the enemy has dug deep into the earth. From the last gulf war to Operation Iraqi Freedom, we have seen how the military has modernized and transformed itself. In the first gulf war—Desert Shield and Desert Storm—only about 10 percent of the weapons used were precision-guided munitions. That changed to the point where 90 percent of the weapons used in Operation Iraqi Freedom were precision guided. I argue that that modernization effort, keeping that technological edge, saved a lot of American and Iraqi lives.

I suggest to my colleagues that this is a dramatic moment in our Nation's history. We have just upgraded the threat level to orange. We have seen last week what is going on in the world—al-Qaida is still alive. They are on the run, but they have the ability to hurt people. They desire nuclear weapons. There are a lot of rogue states that are going to try to pursue a nu-

clear weapon, or fissile materials, and they will most likely be successful. People are going to enhance their biological and nuclear weapons ability.

I argue that to stop research and development on a potential weapon that could destroy a terrorist group or prevent a rogue nation from creating a chemical or biological capacity that is deep underground is illogical—just to take it off the table in a blind fashion, trying to say we are doing something that is going to spread nuclear weapons. I don't believe we are.

Secretary Powell has written a letter on this matter, on May 5, in which he says:

I do not believe that repealing the ban on low-yield nuclear weapons research will complicate our ongoing efforts with North Korea.

It is a reality that the enemies of today and tomorrow will go underground. They will go deep into the earth, and they will have laboratories and research facilities available to them to develop weapons of mass destruction. I hope the Senate will listen to the Pentagon and develop a weapon that counteracts that threat. Whether or not we deploy that weapon we will decide later. But to take the research component off the table and not even plan for that possibility is very irresponsible. We will take up as a body whether or not to authorize this development, as we should.

I implore my colleagues, please do not ignore the threats that exist today, an enemy going deep into the Earth where conventional weapons may not be able to destroy that chemical or biological factory or that nuclear weapons program. Let's at least look at the possibility of having a weapons mix in the future that protects us from the evil that exists today.

I think what the committee has done is very responsible. I congratulate the chairman and all those involved in lifting this ban at the Pentagon's request. History will judge us poorly—who knows what is going to happen down the road—if we as a political body do not listen to what I believe to be a real threat and try to at least talk about and develop a counteraction to that threat for the future. That is what this debate is about.

If this amendment is adopted, it would tie the hands of the American military in looking at weapons systems to combat a real threat at a time when the threats we face are growing, not lessening. I think that would be a very bad move on the Senate's part. It would tie the hands of the Department of Defense unnecessarily.

We are not talking about deploying a weapon. We are talking about researching and developing a weapon that may save lives in the future, and I hope the Senate as a whole will follow the lead of the committee and vote this amendment down. I yield the floor.

The PRESIDING OFFICER. Under the previous order, the Senator from New Mexico is recognized.

Mr. BINGAMAN. I thank the Chair.

Mr. President, I start by saying I have always been a strong supporter of maintaining our nuclear arsenal. I do believe that nuclear weapons have a significant role in our defense strategy, but their use for us in that defense strategy is to deter others from using nuclear weapons. That has been the essential role they played.

It has been a very important role. It was an important role in winning the cold war, and it remains an important role for our military. But the amendment that has been put forward by Senator FEINSTEIN and Senator KENNEDY is not dealing with nuclear weapons as a deterrent. What it is trying to get at is the change in philosophy that seems to have taken place among some in the administration that nuclear weapons are not just to be used as a deterrent; they are also to be used as a weapon. They are to be used in warfighting. They are to be used to counter preemptive threats that may present themselves to us, and that is a substantial change from what we have done with nuclear weapons in the past. I strongly believe it is important to maintain in law the ban that was put in law sometime ago.

This Spratt language, named for Congressman SPRATT, whom we all know and respect, was developed in 1994, and it was developed as a follow-on to an action by George H. W. Bush, Sr., our current President's father, when he was in the White House. He made the decision on September 27, 1991, to take out of our inventory nuclear artillery shells, tactical bombs, landmines—the various tactical low-yield nuclear weapons we had fielded at that time, primarily in Europe.

That decision was made as a follow-on to the end of the cold war. It was a decision which was intended to reduce the risk of some kind of nuclear misstep by a field commander or by accident. It was a step intended to reduce the risk of a nuclear weapon being detonated when, in fact, it was not desired.

There is a lot of history behind this issue. Some might think, if they just tune in and watch this debate, this is a new idea this administration has come up with: Let's develop new low-yield nuclear weapons; let's do the research and gear up for development.

The truth is, we have had many so-called low-yield nuclear weapons in our stockpile in the past. Let me review a little bit of that history.

This first paragraph I have reproduced for folks to look at is the Davy Crockett MK-54 warhead which was a nuclear warhead that was capable of producing the same damage as up to 1,000 tons of TNT. When they talk about low-yield nuclear weapons, they are talking about up to 5,000 tons of TNT. So this is substantially less powerful than that. This was developed back in the fifties. It is technology about which everyone knows. It was launched from a recoilless rifle. This

was a weapon capable of being launched that way. One could send it off anywhere. The range was 1.2 to 2.5 miles. As I say, it had a yield of up to 1,000 tons of TNT. This, to me, is an example of some of the history we know about on low-yield nuclear weapons.

Let me also point to a second example. This is the so-called MADM, the Medium Atomic Demolition Munition. Looking at the photograph, you might say I am talking about the one in the center. I am not. I am talking about the much smaller warhead that is over on the left in this photograph. This could go up to as high as 15,000 tons of TNT. It was in our arsenal until 1986. It was intended for use in destroying dams or bridges, and it was entirely portable. As one can see from the size of this warhead, this would be easily carried by a single person.

The third example, and the last example I want to show, is this W-79. This is one of the weapons that was in our arsenal and was taken out of our arsenal. This is the so-called neutron bomb. We have heard of the neutron bomb. There was a lot of discussion about the neutron bomb a couple decades ago. It had what was then designated a C-plus safety rating because they determined after a while that they could detonate one of these if there was a stray bullet that hit the high explosive and, therefore, one of the reasons it was taken out of the field as an artillery shell was because of the safety problem involved.

To give an idea of the detonation of this neutron bomb, it is pictured in this photograph. One can see that the amount of radioactivity, the amount of damage, the collateral damage from it was very substantial.

Let me go to the last of these charts just to make another point.

My colleague from South Carolina was saying what we need is a nuclear weapon; we need to see about developing a nuclear weapon that can be used to go deep underground and, thereby, get at chemical weapons fabrication activities or perhaps biological weapons fabrication activities.

The truth is, if you put one of these weapons on a rocket and send it off, you cannot get it very deep into the ground. If it is a 12-foot long weapon, the maximum it can go is 48 feet into the ground. If it is 100-ton TNT equivalent, the experts tell us you have to bury that at least 140 feet under the ground or else you are going to have radioactive fallout. If you have a 1,000-ton weapon, you have to bury it at least 450 feet when it is exploded to contain the fallout. The truth is, we cannot put this on a rocket and get it down 450 feet. It is just not practical.

The points I am making are these are not sophisticated weapons. This is not a new technology all of a sudden which someone decided to develop.

This is technology that was in our arsenal. We are now seeing this administration say, OK, let's come back and once again begin to look at this as a

viable part of our warfighting capability. I do not see the justification for it; I do not think it makes sense; and it poses enormous additional risks for us in terms of proliferation potential.

One of the other comments the Senator from Alabama made a few minutes ago was: We already have a great many nuclear weapons. What can be so wrong about developing some that are small?

One thing that could be wrong is that the risk of proliferation of much smaller, more portable weapons, is substantially greater. The smaller the weapon, the easier it is to move. These weapons are not sophisticated. These are not like the very large, high-yield weapons that are difficult to reproduce. There are many countries in this world that have the capability to produce low-yield nuclear weapons, and many of them, I am sure, will get more interested as time goes on if they see this is the direction in which we are moving.

I think Senator KENNEDY made reference to the speech Mr. Putin gave last Friday. The article in the New York Times on Saturday summed it up well when speaking of President Putin. He appeared to be responding to the Bush administration's new nuclear strategy announced last year when he said Russia, too, was considering developing new variants of nuclear weapons.

This was his statement to the Russian Duma. He said: I can inform you that at present the work to create new types of Russian weapons, weapons of the new generation, including those regarded by specialists as strategic weapons, is in the practical implementation stage.

He did not elaborate, nor did his advisers, though some analysts said he appeared to be referring to Russia's efforts to modernize its nuclear arsenal and to develop low-yield nuclear devices. That remark was greeted with applause.

This is a dangerous road we start down if we decide to rely more on tactical nuclear weapons and once again commence the development of tactical nuclear weapons. I think it is an unwise course. My own view of our overall defense strategy is that we have always thought it served our interests to emphasize those areas in which we have a comparative advantage.

We know today, more than perhaps ever in our history, that we have an enormous comparative advantage over any potential adversary in the world in the area of conventional weaponry. We have precision-guided weapons. We have smart weapons. We have demonstrated their use extremely effectively in the recent conflict in Iraq. Our comparative advantage does not lie in developing small, easily transportable nuclear weapons. Many other countries have the capability to do that, and not only countries but perhaps groups as well.

Once development of those weapons is pursued by us, the likelihood of proliferation increases and the likelihood of similar activities by other countries

increases. Those types of weapons can be easily fabricated. They can be easily transported. They can be easily concealed. It is certainly not in our interest.

I know several of my colleagues have said all this provision is, that everyone is getting upset about, is a provision to repeal the ban on research and development, so what could be so wrong with repealing the ban on research and development?

I do think that the reason many of us are concerned is we believe very much that if one of these weapons—if a new type or a new suite of these weapons is developed, it will ultimately be fielded. We believe that is the wrong way to go to maintain our security and to maintain the security of the world in general.

Fred Celec, who is the Deputy Assistant to the Secretary of Defense for Nuclear Matters, recently said that the administration wants the weapon; that is, the robust nuclear earth penetrator—and that is a separate amendment. Senator DORGAN from North Dakota is going to be offering an amendment relating to the robust nuclear earth penetrator sometime later this afternoon. But Mr. Celec said the administration wants the weapon and will move forward with its development and production. If a hydrogen bomb can be successfully designed to survive a crash through hard rock or concrete and still explode, it will ultimately be fielded. That is a news article from the San Jose Mercury.

So there is reason to be concerned with this provision. Congressman SPRATT, I believe, showed good judgment when he proposed this provision in 1994. The Congress showed good judgment when it adopted this provision as a follow-on to the decision by former President Bush to take these kinds of weapons out of our arsenal. I believe we would do well to keep this ban on research and development in place. I hope my colleagues will agree and support the amendment by the Senator from California and the Senator from Massachusetts.

I yield the floor.

The PRESIDING OFFICER. The Senator from Virginia.

Mr. WARNER. In terms of alternating now, I think we should have the Senator from New Mexico address the Senate on this issue.

I yield the floor.

Mr. LEVIN. I wonder if the Senator from New Mexico will yield for an inquiry.

Mr. DOMENICI. I am pleased to.

Mr. LEVIN. Can the Senator give an approximation of how long he will speak?

Mr. DOMENICI. I will be very brief. An hour and a half.

Mr. LEVIN. An hour and a half?

Mr. DOMENICI. No, sir. About 15 minutes.

Mr. WARNER. Mr. President, the Senator can take such time as he feels necessary.

Mr. DOMENICI. I understand.

Mr. WARNER. Because he brings to this debate a very important aspect of many years in the Senate dealing with this subject.

The PRESIDING OFFICER. The senior Senator from New Mexico.

Mr. DOMENICI. Mr. President, I acknowledge upfront the very astute and academically sound argument of my colleague from New Mexico, Mr. BINGAMAN. While I have been working in this field for the last 25 to 26 years in particular, and the last 10 with more emphasis, this has occurred in the last period of time. My work has come as the United States has prepared its great nuclear weapons laboratories to use new kinds of science to determine the viability and credibility of the existing warheads without underground testing.

As everyone recalls, this body passed an amendment, rather overwhelmingly, saying we should not use underground testing for our weapons. I have learned since then how little we knew about that proposition when we cast that vote. Nonetheless, it is the law of the land. It has cost the American taxpayer, in my way of looking at it, billions of dollars.

Frankly, as I look at the risk in the world, I do not think it has saved the world from nuclear weapons as people had thought. Already with that ban, there are new countries with new nuclear weapons, and they did not need underground testing. At least they did not need it as we had assumed they would need it when we stopped ourselves from doing it. Yet we have the greatest scientific community of men and women in the world, believe it or not, accumulated in three laboratories, and about 85 percent of their work goes to that one item.

How can we make sure that the weapons we have are valid without testing, all of which was done in the hope that nobody else would get bombs, get any nuclear weapons, because an underground test would proliferate the desire, if nothing else, for more nuclear weapons?

I was not on the Senate floor for the entire argument when that amendment of nonnuclear testing occurred. My great friend Mark Hatfield was a proponent. But I do know the argument was of the type that if we did not do that, we would be inviting other countries to do what is necessary to develop nuclear weapons. If we did not do it, we could dampen that.

Now, I do not suggest the arguments are analogous.

It is interesting that this enormous debate is taking place regarding an amendment that says nothing in the repeal of the previous amendment regarding low-yield weapons. "Nothing in the repeal made by subsection (a) shall be construed as authorizing the testing, acquisition, or deployment of low-yield nuclear weapons."

We could say we do not believe what we are saying, that it is not true, if America wants to direct its scientists—

the same scientists I just spoke of, incidentally—it will be the same laboratories. They will not invent some new ones. In addition to everything you are doing, you will be given permission to think about, to hypothesize, to ponder, to make pictures of, draw diagrams of low-yield bombs and what they are all about.

Does it make sense, in the kind of world we live, to say to the greatest scientists in the world—we are spending about \$6 billion a year for them to make sure the current nuclear weapons are OK, safe, and will deliver, if called upon, without underground testing, but to say to that same group, you cannot spend any time—you cannot have a department, you cannot have a division, you cannot have your smartest people or even any people in those institutions thinking about low-level nuclear bombs—not making them, not preparing to deploy them, for this statute forbids it.

Our laboratories are filled with dedicated Americans. They want to do their jobs. They want to do no more or no less than they are authorized. They do not want to be called upon by a congressional committee to respond to doing more than they had authority to do; and clearly they never want to be accused of having done less than they were supposed to.

On the other hand, does it seem possible we should be saying to these most brilliant of scientists, here on the wall is a statute and regardless of what comes to your great minds about low-level nuclear bombs, stop thinking about it. It is against the law. We do not want you thinking about it.

Maybe that is a little farfetched. But it is not farfetched to say thinking about it and writing something down about it is against the law, at least if what my colleague from New Mexico says on the floor prevails.

Those scientists know so much more than us about the world and the changes occurring, and we are wondering about what Russia is going to be doing. There is apt to be 3 or 4 nuclear powers in the next 10 years and there is nothing in the world we can do about it. We can sit on the floor and talk about low yield; maybe that is what they are after. There will be nuclear devices that can be delivered long distances causing huge amounts of damage. They are going to happen. The people working on those are not going to spend one iota of concern on whether we have this provision in our law.

Some of our scientists might just come up with a great idea about a low-level bomb that could be great for America considering what they see going on in the world, converse to what the argument has been. The argument has been, we will teach the world to do what we are doing. I am suggesting our scientists will say to us, we are learning from the world what we might want to do in order to keep the peace longer and better and be able to tell our adversaries what you are thinking of doing.

I thought that was what we were all about. I thought that is what Los Alamos scientists are all about. I thought they were part of this great deterrent. I still believe they are. I believe to permit them to work in this area is part of the deterrent. It does not commit the country to build new kinds of weapons. It does not permit us to produce or test new weapons. It does not suggest we should deploy new weapons. It allows our scientists to study and perform research and development options that policymakers in the administration and even in the Congress may want to know more about.

I know this for sure when I say "may want to know more about it." I say that because these smart people might come to us and tell us, believe it or not, something we do not know. Would that be preposterous to some of us sitting in the Senate? Would it be preposterous that after this prohibition is lifted in 5 years they could come to us and say, We have been studying and here is what we have found. It is something you never had in mind, we never had in mind. But think about it. All of that seems to me to come on the good side.

On the negative side, I cannot see where researching, thinking about, intellectualizing about low-level waste, is adding to the proliferation of nuclear weapons problem in the world. Remember, even if someone in the administration wanted the new weapons, they could not proceed to full-scale development, the production and deployment, unless Congress authorizes and appropriates funds required to do so. This has not been done. It should not be done without more information or debate, and it will not be done.

Finally, there are very important intelligence, nonproliferation reasons why our scientists should be able to develop their thinking in these important areas of research. If anyone in this world is thinking about low-level weapons, we must know as much as we can about them. I just said that in a different way a moment ago.

NNSA, the new semiautonomous agency that controls our weapons development, should challenge their scientists and engineers to think, to explore, to discover, to innovate. By removing the prohibition on research and development on low-level yield weapons, our experts will expand their own understanding and capabilities without artificial restrictions.

I repeat, if anything comes out of this that is surprising, it will be what we will be able to do to prevent proliferation from happening somehow, somewhere in the world. In fact, I think that is more apt to happen as a result of the thinking and the development that occurs here by our scientists than the reverse. We have no idea what these great minds can be thinking, but the great minds of the other scientists in the world are thinking about them also.

As a matter of fact, we heard some statements about Russia thinking

about them as if we ought to be afraid of that, because if we do not do it, they will not do it. If anyone believes that, they probably would believe almost anything. They are busy looking at whatever kind of new nuclear weapons that do not break any of the agreements with us. We will soon be greatly reducing our arsenals of heavy weapons, and at the same time other countries and their scientists will develop nuclear weapons. They will be developing low yield ones, too. They will be developing low yield ones with very different ways of using them than we ever thought. We ought to have the very best looking at how that might happen, if it might happen.

I yield the floor.

The PRESIDING OFFICER. The Senator from Wisconsin.

Mr. LEVIN. Mr. President, will the Senator from Wisconsin yield just for a unanimous consent request?

Mr. FEINGOLD. I yield.

Mr. LEVIN. Mr. President, I ask unanimous consent that after Senator FEINGOLD, Senator INHOFE be recognized and then Senator BYRD be recognized after that Senator, and then Senator TALENT be recognized after Senator BYRD.

The PRESIDING OFFICER. Is there an objection? Without objection, it is so ordered.

The Senator from Wisconsin.

Mr. FEINGOLD. Mr. President, I rise in support of the amendment offered by the Senator from California and the Senator from Massachusetts. I am pleased to have cosponsored it. I commend the Senators for offering this important amendment, and I am extremely pleased to be one of a large group of Senators who have come to the floor to express their concern about this policy and to support this amendment.

I share their concern, as I know that many of our colleagues do, about the provision in the underlying bill that would repeal the 10-year ban on research and development of low-yield nuclear weapons. Lifting this ban could be the first step in the resumption of nuclear testing and the creation of new classes of nuclear weapons which I oppose.

Our men and women in uniform are facing new threats, but our defense procurement policy remains planted firmly in the cold war by calling for more nuclear weapons. We should not endorse a policy that could start or spark another nuclear arms race.

I am deeply concerned that the administration's Nuclear Posture Review represents a departure from this country's longstanding nuclear weapons policy. Lifting the ban on low-yield nuclear weapons and funding a feasibility study on the so-called robust earth penetrator and directing the Secretary of Energy to accelerate the readiness posture for the Nevada Test Site from 24 to 36 months to 18 months all point toward a disturbing destination—the resumption of an active nuclear weap-

ons program, including underground testing by the United States.

These decisions send dangerous signals to our allies and adversaries alike. The United States has urged non-nuclear states and rogue operators not to pursue nuclear programs. But if we, as a nuclear power with enough of these weapons to destroy the world many times over, begin developing mini-nukes or other new forms of these dangerous weapons, I think we run the risk of inviting other countries and other organizations to do so as well.

I supported the Moscow Treaty earlier this year because, while it is not perfect, it does move us closer to the goal of reducing the strategic nuclear arsenals of the United States and Russia. I don't think we should undermine this worthy goal by now starting down the path toward smaller, more easily transported nuclear weapons that could fall into the wrong hands.

I recognize that the underlying bill would lift the ban on research and development of low-yield nuclear weapons without authorizing that such weapons be tested, acquired, or deployed by the United States. But I still think this is a perilous first step toward a new class of nuclear weapons. It is one we should not take. I, therefore, urge my colleagues to support the amendment offered by the Senators from Massachusetts and California.

I yield the remainder of my time and I yield the floor.

The PRESIDING OFFICER. The Senator from Oklahoma.

Mr. INHOFE. Mr. President, first, let me make real clear things that somehow get lost in the discussion. I have heard it said by the last four or five speakers that doing this is moving forward with the development and production of low-yield nuclear weapons. Nothing could be further from the truth.

By repealing the ban on low-yield nuclear weapons research, our nuclear weapons experts will be able to explore weapons concepts that could help us to respond to new threats. We ought to treat research and development of low-yield nuclear weapons like research and development of any weapon. For any weapon that we have had, any weapon, conventional or otherwise, we have had to go through this period of time. That doesn't mean we are going to make one. It means we are going to be prepared if need be.

By repealing the ban as we did in the Senate bill, the administration is still required to specifically request funding at each phase of the research and development as required by the National Advanced Authorization Act of Fiscal Year 2003. The Congress has the prerogative whether to authorize and appropriate for such activities. With the many new and emerging threats in the world, we cannot afford to be unprepared.

I was listening to the Senator from Wisconsin talk about how, somehow, this starts some kind of a nuclear race.

Really that is just not true. People argue that research on nuclear weapons would encourage nuclear proliferation. Since 1993, when the ban went into effect, the ban we are seeking to repeal right now, several nations have sought and in some cases achieved nuclear capabilities—in other words, countries such as India and Pakistan and North Korea. There is no correlation between U.S. weapons research and proliferation. More significant is the U.S. track record of nuclear reductions.

Our top military people and diplomatic leaders support repeal of this prohibition: ADM James Ellis, GEN John Jumper, Secretary of State Colin Powell.

In 1994, Congress prohibited any research and development which could lead to the production of a low-yield nuclear weapon. That is less than 5 kilotons. This is an arbitrary restriction and it impedes the ability of scientists and engineers who support our national defense to explore a full range of scientific and technical concepts for the nuclear weapons stockpile.

It has a chilling effect on creative thinking when scientists have to consult a lawyer before exploring concepts involving nuclear weapons. It restricts the ability of this or any administration to explore options to modify our nuclear weapons capability to prepare for changing defense needs in the 21st century.

These needs are changing. I remember 8 years ago, sitting in the Senate Armed Services Committee hearings, when there was a proposal that said we would no longer need ground troops in the next 10 years. It was about 10 years ago. Yet here we come up with the problems that we had in Afghanistan. We had the great battles there, ground troop battles. We went into Iraq. That was on the ground; it wasn't in the air. Now we are looking at other options and possible risks and we don't know what they are going to be.

The point is, we have to be ready for whatever does come. It is prudent national security policy to allow the administration to consider weapons concepts that would hold at risk deeply buried and hardened targets to defeat chemical and biological agents and reduce collateral damage.

Reducing collateral damage—if we were to be able to do this research and ultimately it became necessary to have this, we would be able to penetrate deeply into the ground to knock out chemical threats, to knock out biological threats, maybe even nuclear threats, and not cause any collateral damage. In the absence of that, you would have to use something else, a MOAB, for example, that would clear an area of maybe 5 or 10 square miles, killing everything within that range. So it would be an effort to reduce collateral damage.

Repealing this prohibition would not authorize the administration to build any nuclear weapon. I think it is very important people understand that.

What happens if all of a sudden there is a changing threat out there and we discover we need to be able to develop a low-yield nuclear weapon, if every Senator in here, every Democrat and every Republican, agreed that we had to have this? If we don't do research and development now, it could be years before we would be able to have it. If we go ahead, then we would be able to have it in a very short period of time.

I chaired the Senate Armed Services Subcommittee on Readiness for quite a number of years. I see my colleague from Hawaii over there, who is my ranking member. Of course he chaired it also. We know that the threats change all the time. The whole idea of readiness is to be ready for anything that should come up. Unfortunately, we cannot predict what the future holds.

We predicted it wrong 10 years ago. We predicted it wrong 5 years ago. We could predict it wrong this time. Just by doing research and development, we are not coming out with any kind of production on any kind of low-yield nuclear weapon. It is just a matter of being prepared in the event that everyone should decide that we have to have this capability.

I hope we vote down this effort to stop our ability to be able to do research and development in this area. Again, on every weapons system we have, we have had to go through an extensive and long period of time on research and development. It doesn't cost us any more to be ready in the event that capability should be required.

I thank you very much.

The PRESIDING OFFICER (Mrs. DOLE). The Senator from North Dakota is recognized.

Mr. DORGAN. Madam President, I ask unanimous consent to modify the previous agreement: That I be recognized next and the next Senator to be recognized following the movement back and forth on our side would be Senator AKAKA.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. DORGAN. Madam President, I am listening to this debate, and I guess I just do not understand. We are hearing that it is important for our country to begin studying or developing, researching a new class of nuclear weapons, a new design of nuclear weapons, low yield—which is an oxymoron—low-yield nuclear weapons, bunker buster nuclear weapons.

I was thinking of something Martin Luther King said, which was: "The means by which we live have outdistanced the ends for which we live. We have learned the secret of the atom but forgotten the sermon on the Mount."

I don't understand what we are thinking about here. At a moment in history when we need to be the world leader in stopping the spread of nuclear weapons and reducing the threat of nuclear weapons, we are debating whether we ought to begin producing more nu-

clear weapons. Is there someone here who can't sleep because we don't have enough nuclear weapons? There is roughly 30,000 nuclear weapons on this Earth.

About 2 years ago, or 1½ years ago, our intelligence community thought one was missing. They thought that one from the Russian stockpile had been stolen. At least there was the rumor. They had an epileptic seizure about one nuclear weapon missing. Would it be detonated in an American city? They were concerned about one nuclear weapon.

There are 30,000, roughly, nuclear weapons, and we have people here worried about not having enough of the right kind. I just do not understand.

We just heard there is a change in threat. There may be a change in threat. Everybody knows the threat isn't being addressed in this bill. There is \$9 billion in this bill to build a big, old antiballistic missile system; a national missile defense system. Take a look at the threat meter and find out what the least likely threat against this country is. It isn't that a terrorist or terrorist group will have access to an ICBM with a nuclear tip on it and fire it against the United States. A nuclear weapon, if sent here by a terrorist, isn't coming in here at 14,000 miles per hour on an intercontinental ballistic missile. It will be pulled up at 2 miles an hour at a dock at an American city in a container loaded by terrorists. Yet we are going to spend \$9 billion on national missile defense.

I understand we have been doing that for the last several years. It doesn't make any sense to me. We are unprepared in other areas. At a time when we ought to be leading, to say to the rest of the world, don't build more nuclear weapons, don't use nuclear weapons, this country is sending a signal to the rest of the world in dozens of ways saying, you know, we will not renounce first use. We believe in the opportunity for preemptive attack, if we are challenged; we ought to study new nuclear weapons, a bunker buster design of nuclear weapons.

Again, this issue of low yield is nuts. I don't want to hear people talk about low yield. The people who talk about low-yield nuclear weapons are the same people who talk about the ability to use nuclear weapons. If anybody here thinks there is an ability in this world to use nuclear weapons in a war, then I don't know what planet you are living on. Once the movement of nuclear weapons goes back and forth between adversaries, I am sorry, your children will have no future. If 30,000 isn't enough, I am just wondering what hours of the night you are awake worried about your lack of protection.

I do not understand this at all. If ever this world needed this country in all of its majesty and in all of its wonders of leadership capability, if ever this world needed this country, it is now.

My colleagues are no doubt tired of this. I will point out again what I have

in this desk. I have some pieces of metal that were given to me that came from an ICBM. This came from an ICBM which used to have a warhead on it aimed at the United States. It could have destroyed an American city. We didn't shoot it down. It was never launched. That is how I have this.

We, with Nunn-Lugar funds, destroyed this missile in its silo. Where this missile used to exist, there is now planted sunflowers. Yes. This missile is gone. We sawed wings off bombers. We have destroyed submarines, and we paid for it. We didn't shoot them down. We paid for their destruction under arms control agreements and arms reduction agreements.

Our job at the moment is to continue the Nunn-Lugar program and continue these efforts to say to other countries that all of us must back away from this madness.

This is not modernization; it is madness. How many more nuclear weapons do we want? What kind of an additional signal do we want to give to countries around the world that it is OK to build nuclear weapons and it is OK to be doing research on classes of new nuclear weapons?

I say to those of you and to the administration that I guess they are getting the message. We hear it from Russia. They got the message. We are going to do some research on these so-called low-yield nuclear weapons. They can do some research on low-yield nuclear weapons. I guess they are getting the message. I suppose the Chinese got the message. All of them will get the message. Then our children will have a much less bright future because we will have not seized the opportunity and the responsibility as the world's leading power, economic and military, to steer us in a direction away from nuclear confrontation, away from building more nuclear weapons, and away from first use. We will not have done that. We will have instead flexed our muscles and said that we have unlimited money. Let us just go ahead and spend billions here and billions there.

I found it interesting. Last week I couldn't get one-fourth of \$1 billion through this Senate that had been approved previously to try to feed hungry kids in Africa who are on the abyss of starvation. Forty-thousand people a day die because they do not have enough to eat, mostly kids. That is the equivalent of one Hiroshima bomb every 3 days.

We have plenty of money for all the things we are talking about today. We didn't have enough money to deal with the issue of hunger and famine in Africa a couple of days ago. But aside from the issue of priorities, which, in my judgment, is a twisted set of priorities, losing the opportunity and failing to seize the moment in which American leadership is demanding to move this world away from a belief that we need more nuclear weapons and that it is OK for countries to potentially use nuclear weapons is a miserable failure on the

part of a country and a legacy, in my judgment, in a very negative way.

My hope is that before we go too far we will have the votes on this amendment and subsequent amendments. I intend to offer another amendment in a group of four. I hope we will have the votes to begin to turn this country in a constructive direction in this debate on the authorization bill.

This is about judgment. There is an unending appetite in this Chamber right now to do all of these things. But, in my opinion, this is about using good judgment as a nation to assume our responsibility in the world.

I regret very much that if the work of the committee prevails on the floor of the Senate today, then we will this evening find a world that is much less secure than it was before this committee began its work.

We have the capability to do awfully good things. But it requires our leadership. It requires our character and our judgment to decide there is a right direction and a wrong direction. The wrong direction, in my judgment, is for our country to say to the rest of the world, let us all build some more nuclear weapons. Let us worry about some threat or some rogue nation digging tunnels so deeply we can't catch them or explode them. So let us deal with new nuclear weapons.

I can't think of a more destructive course or a more destructive set of policies than those coming to us in this bill dealing with these issues. Some say it is irrelevant; it doesn't matter; this is only research. Are you kidding? That is what the other countries will say as well as they begin to ramp up their programs. It is only "research" on their next group of designer nuclear weapons. It is only research. But we will have taken the cork out of the bottle, and it won't be easily put back in.

I hope my colleagues will support the amendment. This is a very important vote, perhaps one of the most important votes on the Defense authorization bill.

I yield the floor.

The PRESIDING OFFICER. The Senator from Arizona.

Mr. KYL. It is my understanding that the debate has been going back and forth. Senator ALLARD was in the queue but has graciously allowed me to get in front of him. What I would like to do is propound a very limited request. I ask unanimous consent that after I speak, Senator AKAKA be recognized to speak, and after he has completed, Senator ALLARD be recognized to speak.

Mr. WARNER. Madam President, I am in agreement with that. I want to consult my distinguished ranking member. The Senator from Michigan and I had worked out a schedule.

Mr. LEVIN. I wonder if the Senator from Arizona would modify the request to add Senator REED immediately after Senator ALLARD on his side.

Mr. KYL. Senator AKAKA would be after me, and then Senator ALLARD, then Senator REED.

Mr. LEVIN. Senator REED of Rhode Island.

Mr. WARNER. In that order.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. KYL. Madam President, I appreciate the cooperation of my colleagues. This is a very serious debate. We need to be careful of the language we use and the arguments we make. I would like to respond to a couple arguments just made. I think we can clearly be sending some very bad signals to some very bad countries of the world in the Senate. When a Member of the Senate speaks about low-yield nuclear weapons as "nuts," we make a grave mistake.

The majority of the Armed Services Committee of the Senate, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, the Secretary of Energy—these are very serious people who have a very serious reason for asking that this language be retained in the bill.

The reason low-yield weapons research is being sought is because the world has changed since the time we developed these huge megaton nuclear weapons that can kill millions in just a few seconds. Instead of wanting to use those kinds of weapons, the United States would prefer, if it had to, to use a much smaller weapon, a low-yield weapon.

There are several potential uses for this kind of weapon. To digress for a moment, we used to have a lot of these. They are called tactical nuclear weapons. Russia still does. The United States got rid of ours. Russia says it is going to be getting rid of its tactical nuclear weapons as well. Tactical nuclear weapons are not new. Low-yield nuclear weapons are not new. But the United States, in order to have a credible deterrent against a strategic nuclear attack, developed these very robust weapons that can take out cities, that can take out huge military targets with one weapon. One of the reasons was because we were not very accurate 20 years ago when the weapons were designed. We could get pretty close but nothing like the precision with which our weapons can be targeted today.

In the most recent conflict in Iraq, we literally saw missiles flying through windows of buildings in downtown Baghdad. The kind of precision we have today enables us to use much smaller yield weapons to achieve the same results that large conventional weapons are being used for today. But they can do so much more effectively. For example, we know that some so-called conventional bunker busters were used in an attempt to decapitate the Iraqi leadership in the early stages of the war. We were impressed with the fact that these missiles could actually go through a hole in the floor board by one missile and then three or four more in the same hole and destroy a lot below. But it did not do the job. As good as they were, apparently the leadership of the Iraqi regime lived on. So

we cannot say we have the capability, even in dealing with that regime, to destroy those kinds of targets.

What we know from intelligence is that there are a lot of other nations in the world that know one thing: If you get deep enough underground with enough concrete and steel above your head, they can't get you. That is exactly the kind of facility being built by our potential enemies today. There is only one way to get those, and that is through a precise low-yield nuclear weapon. The design of those weapons is certainly in the mind of our scientists. And if they are allowed to think about this, to do some research on it, we think at least we would be prepared, should the Pentagon decide that it wants to ask the Congress for the authority to go forward with the program, to be able to do so.

The point has been made adequately, this does not authorize anything. This merely removes a self-imposed prohibition on the United States. No other country in the world is suffering under this same prohibition. We legislated this restriction on ourselves. Russia does not have it. China does not have it. Great Britain does not have it. France does not have it, nor do the countries of the world that are proliferating or building weapons of mass destruction, including nuclear weapons in violation of the Nuclear Non-Proliferation Treaty.

There may be a reason for us to need these kinds of weapons in the future. It has also been noted that they could be very useful in the destruction of chemical and biological agents or weapons which are not easily destroyed by conventional weaponry and in any event where the fallout can be more dangerous than the weapon just sitting there on the ground. If you put a large conventional explosion on top of chemical or biological agents, you could end up dispersing those agents in a very dangerous way over a far greater area than if the enemy actually tried to use the weapon. But with a precise low-yield nuclear weapon, you might well be able to destroy that biological or chemical agent or weapon. In this new world there may well be reasons to have these weapons. For somebody to suggest it is nuts is simply an uneducated approach to this very serious issue.

I made the point that this is not an authorization. All we are doing is removing a self-imposed restriction on thinking about this, on doing research. If the researchers conclude it could be done and the Pentagon decided it should be done, Congress would still have to authorize such a program and fund it through appropriations. So I don't think we should be against thinking in the Senate, against researching something that we may well wish we had down the road.

This could save lives. Think about the application of such a weapon as we have today on one of these targets. We would risk killing millions, and there

is no point in doing that. It would be immoral to do that.

A second point made earlier was to demonstrate the ICBMs that have been destroyed and to suggest that if we now move forward with rebuilding some nuclear weapons, we would be signalling to other nations that it is OK to build these nuclear weapons. Let's parse that a little more carefully.

The reason we are destroying nuclear weapons is because we want to get rid of some of these very large nuclear weapons that we don't think we need anymore because circumstances have changed. Frankly, I don't think it is a very credible deterrent for us to say—I will say this regarding Iraq because that is over and so I think one can safely talk about the situation there. I don't want to talk about potential future situations—to Saddam Hussein, if you use chemical weapons against our troops, since we have foresworn chemical weapons and we have foresworn the use of biological weapons—we don't even have them; our only big ticket type here is a nuclear weapon—we won't take any option off the table. We just might use a nuclear weapon if you use biological or chemical weapons against us.

We threatened that once before, and some say it worked to deter his use of those chemical weapons. Would it work today? Does anybody really believe the United States would kill maybe 3 or 4 or 5 million innocent Iraqi citizens by bombing Baghdad with one of our big nuclear weapons today? Those are the kinds of weapons we have. They kill lots of people real fast. As a deterrent when the cold war was going on, we wanted to let the Soviet Union know that they better not launch against us because they would suffer just as much destruction as we would and, therefore, we could deter their actions.

Would it really deter a Saddam Hussein from using biological or chemical weapons against us? Would he really think we would use one of our great big nuclear weapons? I don't think so. So, ironically, these great big weapons are too big to use.

The deterrent may not be credible. As a result, it makes sense for us to destroy a large number of those weapons, to take them out of our inventory and keep only enough that we think would really be necessary in the event we needed to deter a nuclear-armed country, such as Russia or China today. The other legal nuclear countries, of course, are France and Britain. In addition, we have India and Pakistan, which are not part of the Nuclear Non-Proliferation Treaty.

So we say we can deter an action by a Saddam Hussein with a far smaller, less destructive kind of weapon. If he knows that we have a low-yield nuclear weapon that can bust his bunker and all of the other leadership, maybe he will think twice before he orders the use of chemical or biological weapons.

Today, the experience in Iraq shows that we could not get the leadership of

Iraq. So what does this teach other potential enemies? If you burrow deep enough underground and put enough steel and concrete over your head, like Saddam Hussein apparently did, you are not going to be able to get him, or get us, and therefore we have nothing to fear. That is another reason we need these weapons. We are willing to get rid of our great big weapons; that is the signal we are sending. We also will continue to have a credible deterrent with much smaller kinds of weapons.

I mentioned the Nuclear Non-Proliferation Treaty. I will make this point. The nuclear countries of the world that signed the NPT agreed we would be the nuclear powers; but in exchange for other countries that signed up, including countries such as Iran, we said we would provide them with information and assistance regarding atomic energy—the peaceful uses of nuclear energy. We have done that.

When countries have come to us and asked, we have provided that assistance because that is what the NPT calls for. We have abided by it; they have not. What makes anyone think that a self-imposed congressional limitation on the United States has deterred countries such as North Korea and Iran—or India and Pakistan for that matter—from developing weapons in contravention of the NPT?

Obviously, our action hasn't prevented them from developing these weapons. So what kind of an argument is it that this law on the books has been effective at stopping other countries? It didn't stop Saddam Hussein, Iran, or North Korea; and other countries are also trying to work on a nuclear capability.

So let's not kid ourselves. This isn't stopping proliferation. What will stop it is a strong signal from the U.S. that it will not be countenanced, because if you have signed the NPT, like Iran, you don't have any right; you signed that right away for something we gave you. We are going to have a credible deterrent to your use of such a weapon.

Finally, I am astonished at the argument that was made earlier that we should be "setting our priorities straight," we should be willing to spend money on hunger in Africa rather than defending the United States of America. That was the argument made on this Senate floor. I am concerned that we are sending the wrong signals to the world—especially our potential adversaries—if that kind of a statement is left unresponded to.

The U.S. Government has an obligation above all others, and that is to protect and defend the people of the United States of America. That is our primary obligation as Members of this body. If it is necessary not to spend one nickel but simply remove a provision of the law that prevents our scientists from even thinking about this problem, and if we are saying that has a lower priority than spending money on hunger in Africa, then something is gravely wrong.

Fortunately, we are not going to do this. The Armed Services Committee understood the need to remove the restriction on thinking. The Secretary of Defense, the Chairman of the Joint Chiefs, and Secretary of Energy have said to remove that restriction so our people can think about this problem. I think that is the priority here. That is why we should support the action of the Armed Services Committee. It should not be illegal to think of ways of defending America.

I will conclude with this statement. Everybody would like to see a day when there are no nuclear weapons. But we cannot disinvent the nuclear weapon. Either we have confidence in the United States of America as a power that can help do something to stop the wrong people from acquiring these weapons and using them, or we do not. If we have so little confidence in America that we don't trust ourselves with these weapons to be used as a way of stopping the likes of Saddam Hussein, then we have lost our way indeed.

Americans must have the confidence that we will do the right thing as a government. Members of the U.S. Congress make this kind of policy. Do we have so little confidence in ourselves that we are not willing to let our scientists think about this problem?

We hold the decision in our hands to authorize a program, to appropriate the money for a program. So it is not as if we are giving anything up by allowing our scientists to think about this.

Yet that is what the opponents of the committee bill would have us do. I find it incredible that we would, like the Luddites of old, say we don't want to know any more about this because nuclear weapons are really icky things. Well, they are not nice, but somebody needs to have the ability to deter others from gaining their capability or, God forbid, invoking the use of these weapons.

Only a country that is willing to think about what kinds of deterrents may be required in the future is going to be able to provide that degree of stability in the world. That burden rests upon the United States of America. I gladly accept it as a representative of the Government that I think we can trust.

That is what it boils down to today. Do we trust the President, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and a majority of the Committee on Armed Services or don't we? I think we can put our trust in them. I do, and I urge my colleagues to support the committee action and defeat the amendment against the committee action.

The PRESIDING OFFICER. The Senator from Hawaii is recognized.

Mr. AKAKA. Madam President, I rise today to support the amendment offered by Senators FEINSTEIN and KENNEDY to the fiscal year 2004 Defense authorization bill to strike section 3131

and to keep the prohibition on the research and development of low-yield nuclear weapons.

Let me explain to you and my colleagues why I am supporting this amendment. In 1993, Congress placed a prohibition on research and development that could lead to the production of new low-yield nuclear weapons that would have an explosive yield of less than 5 kilotons. I am informed that this administration has sought to eliminate this prohibition.

The administration's Nuclear Posture Review calls for exploring new nuclear weapons "concepts" to be able to attack hard and buried targets in so-called rogue nations with reduced collateral damage.

According to the administration, the restriction on research on low-yield nuclear weapons impedes this effort. But the existing law gives nuclear weapons laboratories sufficient room to explore new nuclear weapons concepts. Adequate research is permitted but not production.

However, the fiscal year 2004 authorization bill follows the administration's request and repeals the 1993 prohibition. Yet the development and production of low-yield nuclear weapons would create many problems. As I noted in my statement to the Senate on April 11, 2003, although the administration is looking to reduce collateral damage from a nuclear explosion, low-yield weapons could still cause widespread devastation if used, threatening civilian populations and U.S. forces.

We already have several conventional weapons that can be used to destroy or incapacitate buried bunkers. Rather than pursuing new nuclear weapons, we could devote additional resources to improving the ability of our conventional forces to render deeply buried targets inoperable.

Developing the new low-yield nuclear weapons could also encourage a new arms race in tactical nuclear weapons and setback U.S. nonproliferation efforts. There is already some evidence of a new action-reaction arms race cycle starting.

Just last Friday, Russian President Vladimir Putin told the Russian Duma in his annual address that Russia is working on a new generation of nuclear weapons. Russian military experts were quoted as saying that President Putin was probably referring to new low-yield nuclear weapons like those proposed by the administration.

Last month, Secretary of State Colin Powell sent a message to the Nuclear Non-Proliferation Treaty Preparatory Committee conference in Geneva in which he said the United States "remains firmly committed to its obligations under the NPT." Assistant Secretary of State John Wolf outlines the steps the United States had taken to fulfill its article VI obligations to the conference. But he expressed very strong worries that the NPT regime was being weakened by nonnuclear countries covertly pursuing nuclear weapons programs.

The majority of the signatories to the NPT treaty agreed to its indefinite extension in 1995 on the assumption the nuclear weapons powers would continue to reduce their nuclear arsenals and ratify a Comprehensive Test Ban Treaty. The administration's pursuit of new nuclear weapons makes it harder to convince the world to crack down on possible NPT violators.

I urge my colleagues to vote for this amendment. We should act to stop the further proliferation of nuclear weapons and prevent the start of a new mini-nuke arms race.

I yield back the remainder of my time.

Mr. REID. I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. WARNER. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. WARNER. Madam President, we have had excellent cooperation on both sides of the aisle in this very important debate. I would like to propound a unanimous consent request on which my distinguished colleague from Michigan, the leader, Senator REID, and I have worked. This is on the pending Feinstein-Kennedy amendment.

I ask unanimous consent that prior to a vote in relation to the pending Feinstein-Kennedy amendment No. 715, the following Members be recognized to address the Senate: Senator REED, 20 minutes; Senator BIDEN, 20 minutes; Senator KENNEDY, 5 minutes; Senator FEINSTEIN, 15 minutes; Senator LEVIN, 25 minutes; and under the control of the Senator from Virginia will be 60 minutes, which I will allocate.

Mr. REID. Madam President, if I can ask the Senator to accept this modification, that the order of the speakers on our side be Senator REED of Rhode Island, Senator BIDEN, Senator BOXER, Senator KENNEDY, Senator FEINSTEIN, and Senator LEVIN.

Mr. WARNER. With that addition, I say to my colleague, we would add more time for Senator BOXER?

Mr. REID. Senator BOXER is scheduled for 5 minutes. Senator LEVIN does not want to be the final speaker, so we will have him go before Senator FEINSTEIN. That is a total of 90 minutes.

Mr. WARNER. That is acceptable.

Let me finish the request. I ask unanimous consent that following the use or yielding back of time, the Senate proceed to a vote in relation to the amendment, with no amendment in order to the language proposed to be stricken prior to the vote.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. WARNER. I thank the Presiding Officer.

I say to colleagues on my side of the aisle, I hope they will approach me as soon as possible to indicate such time

as they might wish to take of the hour under the control of the Senator from Virginia. The Senator from Colorado wishes to address the Senate. I yield the floor for that purpose.

Mr. ALLARD. I wish to make a few comments in regard to the Kennedy-Feinstein amendment currently before us.

Mr. WARNER. Madam President, I say to the Senator, since we discussed what he intends to do, I yield to him such time as he may require.

The PRESIDING OFFICER. The Senator from Colorado.

Mr. ALLARD. Madam President, I think it behooves all of us to take the time and review where we are in this debate.

The current law prohibits research and development of low-yield nuclear weapons. It prevents scientists from even thinking about low-yield nuclear weapons. There is a provision in the bill before us that says we will be able to think about low-yield nuclear weapons, but it specifically prevents testing, acquisition, or deployment of low-yield nuclear weapons unless you come to the Congress and ask permission to move forward with that type of effort.

The Kennedy-Feinstein amendment we are currently considering takes it back to the current prohibition of even thinking about what it is we need to do about low-yield nuclear weapons.

During the Easter break, which was a 2-week break, I spent the first week on townhall meetings in Colorado. The second week I spent visiting our National Laboratories.

Our National Laboratories are pretty much known for their responsibility of managing the nuclear stockpile to make sure that it is safe and reliable. As I visited these laboratories, I found out they do much more than that. They give a lot of thought to what type of deterrence should we have as far as being a superpower. They do a lot of thinking about our vulnerabilities. They think about our potential threats and what might be the proper response to those threats.

So the nuclear laboratory scientists tell me that they wish at least they could study the low-nuclear weapon alternative. I agree. I think at least we ought to look at the pros and cons. We ought to try to gather the scientific data and understand which situations may be needed. Maybe we do not need low-yield nuclear weapons, but they at least need to think about it and they need to have a study.

Ambassador Linton Brooks testified before the Armed Services Committee, and he was the acting administrator of the National Nuclear Security Administration. He also testified before the Strategic Forces Subcommittee on April 8, 2003. This is what he said: Repeal of the low-yield restriction simply removes the chilling effect on scientific inquiry that could hamper our ability to maintain and exercise our intellectual capabilities and to respond to the needs that one day might be articulated by the President.

He also noted that such warhead concepts could not proceed to full-scale development, much less production and deployment, unless Congress authorizes and appropriates the funds required to do this.

As a point of reference in the ban on research and development of low-yield nuclear weapons—low yield is defined as below 5 kilotons as a comparison. So in nuclear technology, we are talking about a relatively small type of warhead.

I respect the view of the scientists I visited at our various laboratories. One thing I came away thinking is they are dedicated Americans. They are dedicated scientists. They have a lot of ingenuity, and they are supported by a tremendous workforce that is dedicated to making sure we have a safer world and that we can actually preserve freedom. They are concerned that we remain a world leader. My view is we are a world leader, but we are a world leader in reducing nuclear weapons.

Earlier the Senator from North Dakota commented about the fact that where he had silos for missiles with nuclear warheads, he now has sunflowers growing in the field. Well, right now, under the Presidential directive of President Bush, we are removing peacekeepers from the ground. We are taking out a sizable proportion of some of the cold war relics that are supposed to act as deterrents as far as a nuclear war is concerned.

While these sunflowers are growing and the President is removing more of our nuclear warheads, what is the rest of the world doing? What I have observed is that there are countries such as Iran and Iraq—no longer Iraq but at one point in time at least—Afghanistan, Pakistan, and North Korea are building more nuclear weapons. They are trying to develop that technology.

We have been a leader. The problem is nobody is following. I think these countries are more concerned not so much about what the United States is doing but about what their neighbors are doing, what it is that they are going to have to require to defend their borders. So this is beyond what we do in this country.

Even though this country remains committed and has shown leadership in reducing our nuclear weapons, we have to remember that other countries are moving ahead, regardless of what we are doing. We need to give some thought to that. We need to study that issue.

I am looking at some figures on nuclear testing which we postponed on September 23, 1992. That was the last date of underground nuclear tests by the United States. Since that date, we have had a number of nuclear tests by China, France, India, and Pakistan. I have a whole list of them.

I ask unanimous consent that this list be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

NUCLEAR TESTING POST SEPTEMBER 23, 1992

Date	Country	Source
9/25/92	China	The Washington Times 10/24/92.
10/5/93—Banon low yield.	Do	Associated Press 10/5/93.
6/10/94	Do	The New York Times 6/11/94.
10/7/94	Do	The Washington Post 10/8/94.
5/15/95	Do	The Washington Post 5/16/95.
8/17/95	Do	The Washington Post 8/18/95.
9/5/95	France	Reuters 12/27/95.
10/2/95	Do	Do.
10/27/95	Do	Do.
11/21/95	Do	Do.
12/27/95	Do	Do.
1/27/96	France	Associated Press 1/28/96.
6/8/96	China	The Washington Post 6/9/96.
7/29/96	Do	The Washington Post 7/30/96.
5/11/98	India	The New York Times 5/12/98.
5/13/98	Do	The New York Times 5/14/98.
5/28/98	Pakistan	The Washington Post 5/29/98.
5/30/98	Do	The New York Times 5/31/98.

Note: Sept. 23, 1992 was the date of the last underground nuclear test conducted by the United States.

Mr. ALLARD. I do not see that other countries are responding to our efforts. So I think we need to think about our own vulnerabilities and our own potential threats. That is what we are trying to do in the armed services bill. We are trying to at least give our scientists an opportunity to study our nuclear weapon vulnerabilities.

Earlier on in the debate, some comment was made—I think we had a dialogue between a couple of Members who were supporting the Kennedy-Feinstein amendment. The point was made during that dialogue that this provision we have in the bill would lead to the building of new weapons. That is not true. We have a specific provision in the bill that says nothing in the provision shall be construed as authorizing the testing, acquisition, or deployment of low-yield nuclear weapons.

What it does provide for is study and thinking about our vulnerabilities, our deterrence efforts, and our potential threats.

I mentioned that Ambassador Linton Brooks testified in front of our subcommittee. I have a letter from General Jumper explaining how important it is that we at least study the low-yield nuclear weapons. I have a letter from Admiral Ellis talking about that need. We also have a letter from Secretary of State Colin Powell talking about the need of having low-yield nuclear weapons. I ask unanimous consent these three letters be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

DEPARTMENT OF THE AIR FORCE,

OFFICE OF THE CHIEF OF STAFF,

Washington, DC, May 8, 2003.

Hon. JOHN W. WARNER,
Chairman, Committee on Armed Services,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: I seek your support for repealing Section 3136 of the Fiscal Year 1994 National Defense Authorization Act (42 USC §2121). This section of the law, commonly referred to as the Precision Low-Yield Weapon Development (PLYWD) limitation, prohibits the Department of Energy and by extension the Air Force from conducting any research and development on a new nuclear weapon design with a yield of five kilotons or less.

Research and development of new low-yield weapon concepts is required in order to evaluate all potential options to meet current and emerging combatant commanders'

requirements. Low-yield nuclear weapons currently in the stockpile simply are not suited to satisfy all these requirements.

We are pursuing full rescission of this section of the law instead of just an amendment. A partial repeal that only permits basic research and development with no prospect for production would effectively have the same impact as the current law.

A similar letter has been sent to the Ranking Minority Member of your Committee and to the Chairman and Ranking Minority Member of the House Armed Services Committee.

Sincerely,

JOHN P. JUMPER,
General, USAF,
Chief of Staff.

DEPARTMENT OF DEFENSE,
United States Strategic Command,

Hon. JOHN W. WARNER,
Chairman, Senate Armed Services Committee,
Russell Senate Office Building,
Washington, DC.

DEAR MR. CHAIRMAN: The Nuclear Posture Review put in motion a major change in the role of our nuclear forces. As we continue to strategize the most effective methods of addressing new and emerging threats to our National Security, it is an inherent responsibility of the Department of Defense to not only reevaluate the capabilities of our nuclear arsenal, but to thoroughly analyze the potential of advanced concepts that could enhance our overall deterrent posture.

US Strategic Command is interested in conducting rigorous studies of all new technologies, and examining the merits of precision, increased penetration, and reduced yields for our nuclear weapons. The nation needs to understand the technical capabilities of threats under development by potential adversaries and to thoroughly explore the range of options available to the United States to deter or defeat them. Once we complete the precise engineering analyses necessary to validate facts related to nascent advanced concepts, the results of the research will enable dispassionate, fact-based discussions on very important defense and policy issues.

The findings of the Nuclear Posture Review were strongly endorsed by the Service Chiefs. Repealing Section 3136 of Fiscal Year 1994 NDAA (42 USC, 2121) will allow US Strategic Command the ability to evaluate the full range of advanced concepts through research and development activities.

Your support in repealing the prohibition on low-yield research and development for nuclear weapons is greatly appreciated. A similar letter has been sent to the Ranking Member of your committee.

Sincerely,

J.O. ELLIS,
Admiral, U.S. Navy,
Commander.

THE SECRETARY OF STATE,
Washington, May 5, 2003.

Hon. JOHN WARNER,
Chairman, Committee on Armed Services,
U.S. Senate.

DEAR MR. CHAIRMAN: I am writing to express support for the President's FY2004 budget request to fund the feasibility and cost study for the Robust Nuclear Earth Penetrator (RNEP), and to repeal the FY1994 legislation that prohibits the United States from conducting research and development on low yield nuclear weapons. I do not believe that these legislative steps will complicate our ongoing efforts with North Korea. Inasmuch as work on the RNEP was authorized and funded in last year's National Defense Authorization Act, I believe that North Korea already has factored the RNEP

into its calculations and will not vary those calculations depending on how Congress acts on this element of the FY2004 budget request.

Thank you for your important work on these issues and please do not hesitate to ask if I can be of further assistance in the future.

Sincerely,

COLIN L. POWELL.

Mr. ALLARD. Many rogue nations have built and are continuing to build hard and deeply buried facilities to protect their most valuable assets such as their leadership, communications equipment, and facilities for the manufacture of weapons of mass destruction. We know that conventional weapons cannot hold all of these targets at risk. A recent report by the Congressional Research Service cited a DIA estimate of some 1,400 known or suspected strategic underground facilities world wide. It further states that the only way to destroy them is with a strong shock wave that travels through the ground.

The question that the Congress and the administration must now grapple with is how to ensure the continued credibility of the Nation's nuclear deterrent into the 21st century. We must recognize that today's stockpile was designed and manufactured to deter the threat by the former Soviet Union. As we all know, that threat no longer exists. Today, we are faced with a multi-dimensional challenge that requires a different set of tools.

By repealing the ban on research and development of low-yield nuclear weapons, this does not mean the United States is about to resume nuclear weapons production. In fact, the United States has not manufactured a new nuclear weapon for more than a decade. The advanced concepts initiative merely allows the labs to explore the technical boundaries of providing solutions to new and emerging national security challenges. Advanced concepts work will allow the labs to train the next generation of scientists and engineers that the Nation will need to ensure a safe, secure and reliable nuclear deterrent.

The fear of the erosion of the firewall between the use of nuclear and conventional weapons use is another unfounded issue. During the 1950s, 1960s, 1970s, and 1980s, when U.S. tactical nuclear weapons were deployed throughout the world and warfighting plans were in place, no U.S. nuclear weapons were ever used. We still maintain the policy that only the President can authorize the use of nuclear weapons and there are no plans to change that very important policy, nor is there any desire on the part of the Department of Defense to develop battlefield nuclear weapons to accomplish what our conventional weapons can already do.

Now I will review the bill that is before us.

It states specifically in the legislation that nothing in the repeal made by section A shall be construed as authorizing the testing, acquisition, or deployment of a low-yield nuclear weapon.

We are just talking about studying, thinking about low-yield nuclear weapons.

The key is if the U.S. President is faced with a situation so grave that the use of nuclear weapons is considered, we must have a full sweep of options. Options in our current stockpile are very limited and would result in a significant level of collateral damage if the nuclear weapon is required to resolve a crisis in terms of the best interests of the United States.

These are challenging times, but they are crucial times, important times, and it is important we make the right decision because the world is changing. We need to know that. We need to know what the parameters are as we move forward in determining what is best to protect America. To have a provision in law that says you cannot study or think about all the options when you are looking at your vulnerabilities and where you need to go to protect America is foolhardy.

I hope the Senate today will defeat the Kennedy-Feinstein amendment and at least allow for study and our scientists to think about various alternatives, including a low-yield nuclear weapon. I am here to ask my colleagues in the Senate to join me in voting no on the Kennedy-Feinstein amendment.

The PRESIDING OFFICER. Under the previous order, the Senator from Rhode Island is recognized.

Mr. REED. Madam President, I rise in support of the Kennedy-Feinstein amendment. First, we should explain the terminology better because there is a suggestion implicit in many of the comments today that a low-yield nuclear device is something akin to a big conventional weapon.

Nuclear weapons are sui generis, the most horrific weapon that man has ever developed. Under this bill we remove a ban on the research and development, and therefore testing and deployment of so-called low-yield weapons, 5 kilotons or less.

Let me put that in perspective. The weapon dropped on Hiroshima was 14 kilotons. The weapon dropped on Nagasaki was 21 kilotons. A 5-kiloton weapon, a 1-kiloton weapon, is a significant weapon causing significant damage.

When we talk about low-yield nuclear weapons, it is almost like talking about a small apocalypse because nuclear weapons have apocalyptic qualities in their destruction and in their fear.

As a result, for more than 50 years we have attempted to put them beyond use. This language in this bill lowers that threshold dramatically. It says we will begin after a 10-year prohibition not just research, but this bill takes away the prohibition on developing, engineering, testing, and deploying weapons. Low-yield weapons. But again, those low-yield weapons have fantastic power.

I heard some of my colleagues talk about the fact if we had such weapons

like this we surely would have gotten Saddam Hussein. Dropping a weapon, even a "low-yield nuclear weapon," in an urban area will create incredible collateral damage. Not as much, of course, as a 400-kiloton weapon but the damage is huge. In fact, Sidney Drell, a physicist and arms control advocate, calculated that a 1-kiloton weapon penetrating at 40 feet, a penetrating type weapon, would create a crater larger than the impact area at the World Trade Center and put about 1 million cubic feet of radioactive material in the air. If we had dropped such a weapon on Baghdad, we would not be in Baghdad today. Our troops would be ringing the city waiting for the radiation to clear and trying to minister to the civilians.

The notion we need these weapons for military purposes is unsubstantiated. There is no military requirement for a so-called low-yield nuclear weapon.

In testimony before the Armed Services Committee on April 8, 2003, Ambassador Brooks, the head of NNSA, testified after a question from Bill Nelson:

Well, is there a requirement in your opinion for a new low yield?

Ambassador BROOKS: No.

Senator BILL NELSON. Is there a requirement for such a weapon under consideration or being developed?

Ambassador BROOKS: There is no requirement being developed. To the best of my knowledge there is no requirement under consideration. There is no military need for this weapon.

That is the testimony of the administration.

I am sure there are many people who would say yes, it is nice to study. There are lots of things that are nice to study. But without a military requirement for such a weapon, why are we abandoning a significant prohibition that has aided, I believe, our efforts in trying to tame or at least contain the proliferation of nuclear weapons?

It seems to me counterintuitive that one could argue, as I think some of my colleagues do, the way to stop the proliferation of nuclear weapons is to build more nuclear weapons. I don't think that makes sense.

There is a suggestion also throughout the discussion this afternoon that this is just about research, nothing else. I was intrigued by this notion and I asked Ambassador Brooks about it at a hearing. His initial justification for the language requested by the administration was it would, in his words, "remove the chilling effect on scientific inquiry that could hamper our ability to maintain and exercise our intellectual capabilities to respond to needs that one day might be articulated by the President."

I asked a very obvious question. Why didn't the administration simply send up a modification to section 3136, the ban, simply to carve out language that will allow research but still would maintain the prohibition against engineering, development, testing, and deployment? I said:

For example, the language could simply say: It shall be the policy of the United States not to produce a low-yield nuclear weapon, including precision low-yield nuclear weapon.

Ambassador Brooks replied to my query:

It is accurate that that would eliminate one of the concerns I have with the language, though the language now does have, we fear, a potentially chilling effect on R&D and, as you described a possible modification, it might not. So speaking narrowly from the prospect of trying to get a robust advanced concept program working, language like that might be entirely suitable.

But that is not what this legislation includes. Not a limited exception to research, but a categorical elimination of the ban on research, engineering, development, testing, deployment of so-called low-yield nuclear weapons.

It is pretty clear here we are really not talking about just research. In fact, I hope this amendment of Senator KENNEDY and Senator FEINSTEIN passes. I support it. If it fails, I am prepared to offer language that will, in fact, limit it just to research.

Now, we also heard before the committee that one of the reasons we need this research project is so scientists can continue to work on it, maintain their skills. It turns out if that is the case, there are plenty of opportunities with existing weapons in the inventory to go ahead and hone those skills.

Even if such opportunities were not readily available, to give up a significant and recognized prohibition on at least one class of nuclear weapons simply to satisfy technical training would at least suggest to me that other ways should be found to train our scientists, and other ways, I think, could be found to train the scientists.

There is also a perception, I think inherent in the discussions here—and I have alluded to it in my initial comments—that the effect of one of these so-called low-yield weapons is that it will produce less collateral damage. That is true, but less than what? Less than the bomb at Hiroshima which, to my recollection, took over 100,000 lives. Are we willing to engage or use or tactically employ weapons that only take, in one fell swoop, 10,000, 20,000, 30,000 lives and claim they are low yield and therefore innocuous? There is nothing innocuous about the weapons we are talking about.

I believe very strongly that it is incumbent upon this Senate to maintain the ban. I think it is wise policy. I think it is a policy that has given us advantages as we have urged other nations to refrain from the development of nuclear weapons.

There are some discussions about whether arms control has succeeded or failed. I think many times we point to those cases in which countries acquire nuclear weapons, but we fail to recognize the many instances where countries have given up their nuclear weapons—such as several countries in the former Soviet Union like the Ukraine, Belarus and Kazakhstan. Because of the

spirit of the nonproliferation treaty and because of the efforts of the United States and other countries urging that they become compliant with the nonproliferation treaty, these countries voluntarily gave up nuclear weapons. I do not know that today, if they were watching what we are doing here, they would be so eager to give up their nuclear weapons.

So we lose a great deal more than simply this language in the bill. I think we lose a diplomatic advantage, in terms of the goal which I hope we are still pursuing, which is the elimination, I hope, or certainly the containment, of nuclear weapons.

I urge all my colleagues to think very clearly and to recall several, for me, salient points. These are weapons of horrendous effect. Don't think low-yield, think small apocalypse. These are weapons that have no military requirement today.

What we do here will be emulated by other countries. That is the nature of world leadership. We have a chance to preserve at least this aspect of arms control, which will give us the opportunity, I hope, to argue for even more, and more effective means of nonproliferation.

I urge my colleagues to support the Feinstein-Kennedy amendment.

I yield my time to the Senator from Michigan.

The PRESIDING OFFICER (Mr. ALEXANDER). Who yields time?

The Senator from Virginia.

Mr. WARNER. Mr. President, we are now operating under a time agreement. We will have our distinguished colleague from Nevada here momentarily. For the moment, let's put in a quorum call and this side will bear the time on the quorum call because I see my two colleagues are engaged in a colloquy. So I observe the absence of a quorum and ask that it be charged to this side.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. ENSIGN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. WARNER. I yield to the Senator from Nevada such time as he may require.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. ENSIGN. Mr. President, the 1994 National Defense Authorization Act stipulated that:

It shall be the policy of the United States not to conduct research and development which could lead to the production by the United States of a new low-yield nuclear weapon, including a precision low-yield warhead. The Secretary of Energy may not conduct, or provide for the conduct of, research and development which could lead to the production by the United States of a low-yield nuclear weapon.

This legislation has been effective in preventing our nuclear weapon scientists from conducting any research into these low-yield nuclear weapons.

I believe that repeal of the low-yield research and development prohibition is in the national interest. The National Security Strategy outlined in the 2001 Nuclear Posture Review included the long-term goal to maintain a strong nuclear deterrent with a smaller nuclear arsenal by utilizing missile defense and conventional strike capabilities. To accomplish this without putting U.S. safety or security at risk requires that the Department of Defense and the National Nuclear Security Administration be allowed to adapt and/or rebuild the existing nuclear stockpile to meet current and emerging threats.

The United States has deployed low-yield nuclear weapons throughout the history of the stockpile and has them today. These weapons have enhanced nuclear deterrence by providing the President with credible options for attacking targets of national importance. The existence of low-yield weapons over the last 50 years has not blurred the nuclear threshold and it is unlikely that future conceptual studies will either. Maintaining a strong research and development capability will, more likely, assure our allies and dissuade and deter our adversaries.

The Department of Defense has important and emerging missions that low-yield weapons can uniquely address. For example, low-yield weapons have the potential to significantly reduce collateral effects and yet still provide the high temperatures needed to destroy chemical and biological agents stored in bunkers. The 1994 legislation has been a significant barrier to the advanced development program needed to study this capability and other innovative technologies.

Maintaining a viable nuclear weapons enterprise is vital to both the National Nuclear Security Administration and the Department of Defense. The low-yield research and development prohibition has had a chilling effect on the ability of National Nuclear Security Administration scientists to respond to Department of Defense requirements and in fulfilling the goal of developing the responsive infrastructure needed to respond decisively to changes in the international security environment or to stockpile surprises.

The low-yield research and development prohibition has been called "a pillar of arms control" by its supporters and its repeal a possible cause of increased global nuclear proliferation. However, nuclear proliferation occurred steadily throughout the 1990s. India, Pakistan, North Korea and others have pursued active nuclear weapon development programs despite the United States self-imposed refrain from low-yield studies.

Repeal will not commit the United States to producing new or modified warheads. Congressional approval is required prior to any full-scale development.

The Feinstein-Kennedy amendment would strike the repeal of the prohibi-

tion on research and development of low-yield nuclear weapons in the defense authorization bill.

It should not be illegal to think of, or research, ways to defend America. I urge my colleagues to vote against the Feinstein-Kennedy amendment.

The PRESIDING OFFICER. The Senator from Delaware.

Mr. BIDEN. Mr. President, how much time do I have available under the unanimous consent agreement?

The PRESIDING OFFICER. Twenty minutes.

Mr. BIDEN. I thank the Chair.

Before I begin speaking in support of the Kennedy amendment, I would like to make just one generic point. I find it fascinating that the United States of America, of all countries in the world, feels the need to increase its nuclear arsenal at this moment—low-yield, high-yield, no-yield, any yield.

It is fascinating that, at this moment in the world's history, in our relative strength and power, we are the ones who think we need another nuclear weapon in our arsenal. But that is just, as a friend of mine named Arlen Mekler used to say, a random thought.

Let me get to the heart of this. I obviously support the Feinstein-Kennedy amendment which would keep the 1993 Spratt-Furse amendment in place. That amendment, as we all know, bans all work on low-yield nuclear weapons, those with a yield below 5 kilotons. We had a lot of reasons to do that. It is sometimes useful to remember why we did these things in the first place. I might add we enacted that amendment at a time when the Russians had a whole heck of a lot more weapons than exist now; at a time when things were actually a little more dangerous, when our vulnerability to nuclear attack was greater than it is today.

But the question now is, Why should we oppose the repeal of that ban? After all, section 3131 states:

Nothing in the repeal . . . shall be construed as authorizing, testing, acquisition, or development of a low-yield nuclear weapon.

So why stop our nuclear weapons labs from just thinking about these low-yield weapons?

One answer is that the current law doesn't restrict research and early development on these low-yield weapons. It only prohibits later stages of development and engineering that are geared toward the production of low-yield nuclear weapons.

Obviously, what we would do by lifting this ban is to be in the position of being able to move toward production of those weapons, a notion that will not be lost on the rest of the world.

The other answer is that low-yield nuclear weapons are not like regular ones. Regular nuclear weapons are designed to deter adversaries. The massive destruction and civilian casualties that they can cause make nuclear weapons unlike even other weapons of mass destruction. Low-yield nuclear weapons are different. They bridge the

gap between conventional weapons and the city-busting weapons of the cold war, and they offer the lure of a better way to destroy point targets. Supporters of low-yield weapons argue they could deter an adversary, and that is true. All nuclear weapons have a deterrent function. But the deterrent benefits that low-yield weapons provide are far outweighed by both the risk that they will actually be used and the dangerous signal they send to other countries, whether intentional or not, that we intend to fight a nuclear war.

Low-yield weapons also blur the distinction between nuclear and conventional war, and they begin to make nuclear war more "thinkable," as Herman Kahn might have said. Herman Kahn's book was titled "Thinking About the Unthinkable." He understood that nuclear war was unthinkable, even as he demanded that we think about how to fight one, if we had to.

Looking at the foreign defense policies of the current administration, I fear they fail to understand that very vital point. They want to make nuclear war "thinkable." Section 3131 of this bill could make it "thinkable" that we could use these low-yield weapons—as if we needed to have these low-yield nuclear weapons, despite the overwhelming conventional deterrent we have. Had we had them, I wonder if anyone might have suggested that we use these low-yield nuclear weapons that we may produce against any of the bunkers Saddam Hussein was in. I am sure we could hear a voice today that if we had a low-yield nuclear weapon, we could have used it that first night and guaranteed he was gone. The fact that we would have been the only country for the second time in world history to use a nuclear weapon, in this case unlike the first, without any real need, would have been lost on some people. But, I wonder what that message that would have sent to India and Pakistan, which are cheek to jowl with nuclear capability.

The administration's failure, in my view, to understand that nuclear is still "unthinkable" is, I think, the most fatal flaw in this approach. That failure to understand could lead to bigger failures—a failure to understand how to keep other countries from developing nuclear weapons, a failure to view nonproliferation as a vital and a workable policy objective, and perhaps even a failure to avoid nuclear war which would do horrible damage to any country involved, including ourselves.

Consider what the administration has said regarding nuclear weapons. We parse out what the administration says a piece at a time. I don't think we understand that the rest of the world, friend and foe alike, takes it in its total context. Let us look at the whole range of what they have said so far about nuclear weapons.

The Nuclear Posture Review of December 2001 spoke of reducing U.S. reliance on nuclear weapons. But it also

reportedly listed not only Russia and China but also North Korea, Iraq, Iran, Syria, and Libya as potential enemies in a nuclear war with the use of nuclear weapons. I emphasize "reportedly listed"—I have not looked at the classified document. I am referring to what has been printed on the Web and what has been in the press. The Nuclear Posture Review spoke of possibly needing to develop and test new types of nuclear weapons, and gave that as a reason for increasing our nuclear test readiness, and further said nuclear weapons might be used to neutralize chemical and biological agents.

More recently, civilian Pentagon leaders ordered a task force to consider possible requirements for new low-yield nuclear weapons, even while assuring the Senate that no formal requirement has yet been established.

A Presidential strategy document reportedly stated the United States might use nuclear weapons against a country with chemical or biological weapons. Then, in a runup to the war in Iraq, the administration proclaimed (but never explained) a new doctrine of preemption against any potential foe that acquired weapons of mass destruction.

All that taken individually is understandable. Taken collectively, it could give someone a very foreboding picture. And do those statements increase our leverage over potential foes, and with a world community at large, or do they only give the rogue states the argument that they really are threatened and, therefore, really need nuclear weapons? Do our statements enable the rest of the world to "blame the victim," as the neo-conservatives would say—and I would agree with them on the outrageousness of that—instead of blaming those responsible for setting disorder in motion?

If you are North Korea, or Iran, or Libya, or Syria, which part of the reports I just referenced are you likely to rely on to make your specious case to the rest of the world?

We have seen the willingness of the rest of the world to engage in the suspension of disbelief. As a friend of mine said, never underestimate the ability of the human mind to rationalize. We have seen our friends, from the French on, rationalize why we shouldn't do what needs to be done.

Which part of the administration's strategy statements, which I briefly outlined, do you think the bad guys—North Korea, Iran, Libya, and Syria—are likely to rely on? The part where we say we reduce our reliance on nuclear bombs, or the part that names those countries as a possible target for nuclear preemption?

As long as you are already listed on the possible target list, what are you going to say, and what are you going to do? Obviously, they are going to say, "We have to do this because of what the United States is doing."

There is no one in the world who doubts our capacity to annihilate, by

conventional weapons alone, any other country in the world. There is no doubt in anyone's mind. And now we are saying that for our defense, we need another nuclear weapon. How do you think the world will interpret that? Some will say it doesn't matter what the rest of the world thinks. But it surely matters, in 1,000 different ways, whether it is a matter of deciding you will not let us sell chickens in your country or deciding whether you will allow businessmen to operate in your country or deciding whether you will cooperate in any other 500 ways we need cooperation on.

What do our statements say, if you are North Korea or Libya or anywhere else? Do you say the United States is getting a low-yield nuclear weapon, so it is time we gave up our efforts to get nuclear weapons? Or if you think we are getting a low-yield nuclear weapon, might you decide it is time to accelerate your efforts?

So far we have one clear answer, from North Korea. It is not the one we wanted. Iran appears to be accelerating its nuclear weapons program as well. I am not suggesting they would not be doing that if we weren't enunciating the policies of this administration. I suspect they would anyway.

The whole question here is, How do we keep dangerous weapons, particularly nuclear weapons, out of the hands of the most dangerous people in the world, be they terrorists or those who would support them? That is our policy; that is the President's policy; and I agree with it. But obviously, we haven't quite gotten it right. So far, I don't think the administration has the answer to the question of how to achieve our objectives.

For a while, it seemed as though the administration's answer was to declare war on every adversary that dared to go nuclear. But do we really intend to go to war with North Korea, if the price is the slaughter of hundreds of thousands of South Korean civilians? Do we intend to go to war with Iran, when we cannot guarantee security in Iraq?

The list of countries that we accuse of having weapons of mass destruction is long; will we take them all on? And what do we do when Indian officials cite our Iraq war arguments as justification for a possible Indian attack on Pakistan that could risk a nuclear war? Is this the world we want?

The Administration has refused to negotiate directly with North Korea, so we have yet to really test North Korea's claim that it would be prepared to meet all our security concerns in return for truly normal relations with us. Instead, we have demanded that North Korea first renounce its nuclear programs and take tangible steps to dismantle them.

I sympathize with the concern not to be bullied or blackmailed. Nobody likes to be seen as backing down. I even sympathize with the President's intense dislike of North Korean leader

Kim Jong Il. There is much to dislike in the man, and even more to dislike in his regime.

But what have we achieved through this policy? So far, we have gotten the end of the 1994 Agreed Framework—which had kept North Korea from reprocessing more of its spent nuclear fuel to get plutonium for nuclear weapons. We have seen international inspectors kicked out of North Korea. And now North Korea may be reprocessing its spent nuclear fuel, which could give it enough material for a half dozen more nuclear weapons.

We may be making some progress, with China engaging North Korea. If we are lucky, North Korea's posturing will lead China and Russia to finally support us and bring some pressure on North Korea. But we don't know whether they can really influence a North Korea that sees itself already in the American crosshairs as part of the "axis of evil."

The administration talks of stopping North Korea from exporting its nuclear weapons. That worries me a little bit because it implies we have already given up on stopping them from producing them.

And North Korea could just export plutonium with which to make nuclear weapons; they will be able to become the plutonium factory of the world if they keep on the road they are on now. How are we going to stop that? The plutonium needed for a nuclear weapon can fit in a briefcase. It does not even need much shielding because it is not very radioactive. The whole shipment might be bigger than a bread box, as Steve Allen used to say, but it wouldn't be much bigger. It certainly wouldn't be bigger than a trash can. Can we really stop and search every trash can leaving North Korea? What will we do if a year from now North Korea claims to have provided weapons plutonium to groups in other countries that will destroy major cities unless we do what it wants?

What are we going to do about Iran, which has North Korean medium-range missiles and is moving toward the ability to enrich its own uranium?

Nobody ever said that nonproliferation was easy. I don't have a silver bullet, and I don't expect the President to have one either. But don't we have to keep our eye on the ball? When conservatives opposed the Comprehensive Nuclear Test-Ban Treaty, they said countries would build nuclear weapons for their own strategic reasons. That's right. It means if we want to prevent proliferation, or roll it back, we have to affect those strategic calculations.

Nonproliferation policy gives us a framework for those efforts. The Nuclear Non-Proliferation Treaty gives us international support and may affect the calculations of countries whose neighbors sign and obey the treaty. The Nuclear Suppliers Group buys us more time by restricting exports of nuclear and dual-use materials and equipment. But in the end, it still comes

down to influencing a country's strategic calculations.

How can we influence those countries? Deterrence is one big way to influence them. Any country that builds nuclear weapons knows if they use them on us, they will very quickly cease to exist. But deterrence is still a mind game. It didn't help when the administration belittled deterrence in order to press its case for missile defense. And deterrence may not work if we say: By the way, we may still target you, even if you don't build nuclear weapons.

For countries that are not our enemies, security assurances are a big way to influence them. The U.S. nuclear umbrella offers a country a lot of security at a low cost; but that umbrella may not look so good if the United States is threatening nuclear war against a large number of countries. At that point, our friends may question whether we will really be able to protect them, when we are taking on all those other countries. That is the question you hear people asking in Japan.

To achieve lasting nonproliferation, we must treat the regional quarrels that drive countries to seek nuclear weapons. We did that with Argentina and Brazil. As South Africa moved away from apartheid, we were able to do that there as well. We are making a real effort to help India and Pakistan step back from the brink and have to continue that effort. But we also have to address security concerns in east Asia, including North Korea's concerns, if we are to keep that whole region from developing nuclear weapons, weaponizing the peninsula, and Japan becoming a nuclear power. We have to pursue peace in the Middle East, if we are truly going to take advantage of our military victory in Iraq.

Nor is there really any alternative to working with the international community. We don't have the ability to inspect sites in Iran; the Atomic Energy Agency does have that ability. Our forces in Iraq don't have a great record in their hunt for weapons of mass destruction; the IAEA and the U.N. could help in that hunt, both by providing detailed information from past inspections and by helping to monitor sites they have visited in the past.

We cannot close down proliferation traffic by ourselves. The cooperation of other countries, especially Russia and China, is essential.

These are the paths to nonproliferation. They are long and difficult. We don't know whether they will succeed, but we can see where we want to go, and we can see how working these issues will help us get there.

But building low-yield nuclear weapons is not a path to nonproliferation; neither is a program to do R&D on such weapons, while Defense Department officials tell people to come up with reasons to build them; neither is a program to test these weapons, which

would surely be necessary to develop a new low-yield weapon, and which would just as surely be the death knell not only of the Comprehensive Nuclear Test-Ban Treaty—which I think is the objective of some—but of the Nuclear Non-Proliferation Treaty, the NPT.

Frankly, neither is nonproliferation served by the administration's plan to field a nearly worthless missile defense system in Alaska next year, just so the President can say he did it. The push to deploy that system has been at the expense of making an effective defense. The defense will lack the radar it needs for several years, and the space-based infrared collection it needs for even more years. And the funds and equipment to deploy it are coming out of the funds and equipment needed to test it, to improve it, and to make sure it works. You have to wonder what the administration's priorities are.

The path of deterrence, security assurance, nonproliferation, diplomacy, and sensible weapons development is difficult, but at least it is headed in the right direction.

The path of hasty deployment of a missile defense that cannot be useful for years to come is simply foolish. The path of new nuclear weapons, new nuclear testing, and looking at nuclear weapons as something "normal" may be a highway paved with good intentions, but as the nuns used to make me write on the board after school when I misbehaved: The road to Hell is paved with good intentions.

This is a road to disaster. We should know better than to go down it.

The Feinstein-Kennedy amendment, in my view, will keep us off that dangerous highway. It deserves our support.

I yield the floor.

Ms. MIKULSKI. Mr. President, I rise in support of the amendment offered by Senator FEINSTEIN, Senator KENNEDY and others on low-yield nuclear weapons.

The Defense Authorization bill would repeal the ban on research and development of low-yield nuclear weapons, sometimes called "mini-nukes."

The ban, known as the Spratt-Furse Amendment, was enacted in 1993. That law prohibits "research and development which could lead to the production by the United States of a low-yield nuclear weapon." It even has specific exemptions, including allowing research on existing weapons and research to address proliferation concerns.

To state it plainly, this is not about basic research or defensive research. This is about research and development to produce new nuclear weapons. And since these weapons would have yields of less than 5 kilotons of TNT, these are not strategic weapons.

That means that if we pass this bill without adopting the Feinstein amendment, we are heading down the path of developing new, low-yield, tactical nuclear weapons. And you can bet that if we develop these weapons on the draw-

ing board, we will see a demand to build and test these weapons to be sure that they would work. Why would we build these mini-nukes if we don't intend to use them?

We don't need to go down that path. America has the strongest military in the world. We also have a huge arsenal of strategic nuclear weapons, which can strike anywhere in the world, for deterrence. We don't need tactical nuclear weapons, not even to strike buried targets like bunkers. We have conventional weapons to do that. Our scientists are developing better weapons all the time. I am so proud of the brilliant people at the Naval Surface Warfare Center in Indian Head, Maryland, who developed and produced the "bunker-buster" thermobaric bombs used against caves in Afghanistan. But the bottom line is that America doesn't need new nuclear weapons.

I don't want to go down that path because it is destabilizing and dangerous to America's national security.

Why is it so dangerous?

It would signal that the U.S. would no longer use nuclear weapons only for deterrence. That would legitimize nuclear weapons and increase the risk that they'll be used against us or our allies. If we move to testing of nuclear weapons, other nations would almost surely follow our lead.

Increasing the range and number of weapons in our nuclear arsenal would fundamentally undermine our nuclear nonproliferation efforts, including the Nuclear Non-Proliferation Treaty, NPT. That would mean more countries developing and deploying nuclear weapons.

The production of small nuclear weapons, some of which could even be portable or easily transported in a truck, poses a particular danger. Even if the U.S. would effectively safeguard such weapons, other countries might develop similar weapons. The presence of a large but unknown number of tactical nuclear weapons in Russia poses one of the greatest dangers to our national security. If we are concerned about terrorists getting nuclear bombs, the last thing we should do is develop more small, easily-transported weapons.

America's national security will best be served if we keep in place the existing ban on research and development leading to production of low-yield nuclear weapons. I urge my colleagues to join me in support of this amendment.

Mr. BYRD. Mr. President, for more than half a century, our world has lived under the specter of a nuclear Armageddon. The end of the cold war has reduced this threat, but both the United States and Russia continue to be armed to the teeth, each side possessing many thousands of nuclear weapons, any one of which could devastate an innocent city.

During the cold war, both Democratic and Republican Presidents held out the chance that an end to the nuclear arms race could lead to the renunciation of nuclear weapons. I point

to article VI of the Nuclear Non-Proliferation Treaty, signed by President Nixon in 1968, and ratified by the Senate in 1969: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control."

But the United States is no longer striving for a world free of nuclear weapons. The administration now seeks to develop a new generation of nuclear weapons, from bunker-busting hydrogen bombs that could wipe out a buried cache of arms, and a whole city with it, to low-yield mini-nukes, which could even take the form of the suitcase nuclear weapons that are the worst case scenario for our homeland security planners.

The alarm at the development of these new weapons is underscored by the Nuclear Posture Review, released in January 2002, and the National Security Strategy, released in September 2002. Taken together, these documents envisage a United States that could strike anywhere on the globe with overwhelming force. The Nuclear Posture Review, in particular, moves breathlessly from discussions of conventional weapons to strategizing on the use of nuclear weapons.

The unavoidable conclusion is that the administration seeks to reduce, and perhaps eliminate, the difference between conventional and nuclear weapons.

A new reliance on nuclear weapons for our national security can only lead us to greater dangers. CIA Director George Tenet warned the Armed Services Committee on February 12, 2003, that the "domino theory of the 21st century may well be nuclear." We must heed this warning.

One powerless country after another may seek to develop the most extreme weapon of mass destruction in order to assure its security, fearing an imminent, preemptive attack from the world's only superpower, which views itself as being unconstrained by international law, the U.N. Security Council, or the court of world opinion.

Rather than attempt to head off this destabilizing trend, this administration has recast its preemptive war as a liberation of the oppressed, threatened to find ways to punish allies who opposed our belligerency, and proposed the development of new nuclear weapons.

If we do not wish to be in a state of perpetual war, the United States must recapture its standing as a peacemaker. Let us step back from the brink of a nuclear arms race. Moving forward with new bunker-busting and low-yield nuclear weapons can only send us in the wrong direction. I urge my colleagues to reject the moves by this administration to initiate new nuclear arms programs.

Mr. REID. Mr. President, I ask unanimous consent that under the agree-

ment we are now working, the time for Senator BOXER be given to the Senator from Massachusetts, Mr. KENNEDY. So instead of 5 minutes, he has 10 minutes.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. WARNER. Mr. President, I ask unanimous consent that immediately following the vote this evening on the Feinstein-Kennedy amendment, Senator REED be recognized in order to offer an amendment on the subject of low-level nuclear weapons; provided further that immediately following the reporting of that amendment, Senator WARNER be recognized to offer a second-degree amendment; provided further that following any debate with respect to the amendments this evening, the amendments be temporarily set aside, and when the Senate resumes consideration of the bill tomorrow morning, there will be 20 minutes equally divided for debate between Senator WARNER and Senator REED. Finally, I ask that following the use of that time, the Senate proceed to a vote in relation to the Warner second-degree amendment, and that if the amendment is agreed to, then the underlying amendment be agreed to, as amended.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. WARNER. Mr. President, I would like to proceed on this side for about 5 or 6 minutes and then we will rotate. I must say, I express my pleasure at the cooperation we are receiving on both sides of the aisle, particularly from our Members with regard to amendments. I might say there is a colleague on that side of the aisle who has a very meritorious commitment to be at a certain place at 7:45, and it is a family matter. We are going to try to yield back time on our side to accommodate the colleague on the other side. I am not announcing the time exactly, but I hope it can come about at about 7:42 or 7:43, enabling him to meet a very serious matter relating to his children. We are going to make that work; is that correct?

Mr. LEVIN. We are going to do our best. While the Senator is speaking, I will talk to Senator KENNEDY and Senator FEINSTEIN.

Mr. KENNEDY. I think I will only need 3 1/2 or 4 minutes, if we are trying to accommodate somebody.

Mr. LEVIN. I am willing to cut my time down as well. I haven't talked to Senator FEINSTEIN, who has already cut her time down.

Mr. WARNER. We are providing flexibility to my colleague from Michigan to try to make it work.

Mr. President, I think it is important that in the Record of this debate there at least be one statement, if I may say, on behalf of the Senator from Virginia which enables the reader of the RECORD to determine with ease exactly what the debate is about. For that purpose, I will make a broad unanimous consent request.

Mr. President, I ask unanimous consent that the following material be printed in the RECORD: First, the existing law passed in 1994, which is the subject of the debate we are now having. That is to be followed by the submission of the Department of Defense as to the rationale for removing this particular law. That is to be followed by the manner in which we did it in the Armed Services Committee—it is a copy of the bill section. That is to be followed by correspondence received by the Senator from Virginia, first from the Secretary of State in which he expresses his opinion in regard to the amendment; and then the statement by Admiral Ellis, Commander of the Strategic Command, stating his support for the work done by the committee. That is to be followed by a letter from General Jumper, expressing his support for the work done by the committee. Then I have listed as a matter of convenience for my colleagues the seven steps that are taken, traditionally, with respect to nuclear weapons.

That is the information relevant to this debate.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

EXISTING LAW PASSED IN 1994

SEC. 3136. PROHIBITION ON RESEARCH AND DEVELOPMENT OF LOW-YIELD NUCLEAR WEAPONS.

(a) UNITED STATES POLICY.—It shall be the policy of the United States not to conduct research and development which could lead to the production by the United States of a new low-yield nuclear weapon, including a precision low-yield warhead.

(b) LIMITATION.—The Secretary of Energy may not conduct, or provide for the conduct of, research and development which could lead to the production by the United States of a low-yield nuclear weapon which, as of the date of the enactment of this Act, has not entered production.

(c) EFFECT ON OTHER RESEARCH AND DEVELOPMENT.—Nothing in this section shall prohibit the Secretary of Energy from conducting, or providing for the conduct of, research and development necessary—

(1) to design a testing device that has a yield of less than five kilotons;

(2) to modify an existing weapon for the purpose of addressing safety and reliability concerns; or

(3) to address proliferation concerns.

(d) DEFINITION.—In this section, the term "low-yield nuclear weapon" means a nuclear weapon that has a yield of less than five kilotons.

SUBTITLE C—OTHER MATTERS

Section 221. Section 3136, the so-called PLYWD legislation, prohibits the Secretary of Energy from conducting any research and development which could potentially lead to the production by the United States of a new low-yield nuclear weapon, including a precision low-yield warhead.

This legislation has negatively affected U.S. Government efforts to support the national strategy to counter WMD and undercuts efforts that could strengthen our ability to deter, or respond to, new or emerging threats.

A revitalized nuclear weapons advanced concepts effort is essential to: (1) train the

next generation of nuclear weapons scientists and engineers; and (2) restore a nuclear weapons enterprise able to respond rapidly and decisively to changes in the international security environment or unforeseen technical problems in the stockpile. PLYWD has had a "chilling effect" on this effort by impeding the ability of our scientists and engineers to explore the full range of technical options. It does not simply prohibit research on new, low-yield warheads, but prohibits any activities "which could potentially lead to production by the United States" of such a warhead.

It is prudent national security policy not to foreclose exploration of technical options that could strengthen our ability to deter, or respond to, new or emerging threats. In this regard, the Congressionally-mandated Nuclear Posture Review urged exploration of weapons concepts that could offer greater capabilities for precision, earth penetration (to hold at risk deeply buried and hardened bunkers), defeat of chemical and biological agents, and reduced collateral damage. The PLYWD legislation impedes this effort.

Repeal of PLYWD, however, falls far short of committing the United States to developing, producing, and deploying new, low-yield warheads. Such warhead concepts could not proceed to full-scale development, much less production and deployment, unless Congress authorizes and appropriates the substantial funds required to do this.

Subtitle B—Program Authorizations,
Restrictions, and Limitations

SEC. 3131. REPEAL OF PROHIBITION ON RESEARCH AND DEVELOPMENT OF LOW-YIELD NUCLEAR WEAPONS.

(a) REPEAL.—Section 3136 of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103-160; 107 Stat. 1946; 42 U.S.C. 2121 note) is repealed.

(b) CONSTRUCTION.—Nothing in the repeal made by subsection (a) shall be construed as authorizing the testing, acquisition, or deployment of a low-yield nuclear weapon.

THE SECRETARY OF STATE,
Washington, May 5, 2003.

Hon. JOHN WARNER,
Chairman, Committee on Armed Services,
U.S. Senate.

DEAR MR. CHAIRMAN: I am writing to express support for the President's FY2004 budget request to fund the feasibility and cost study for the Robust Nuclear Earth Penetrator (RNEP), and to repeal the FY1994 legislation that prohibits the United States from conducting research and development on low yield nuclear weapons. I do not believe that these legislative steps will complicate our ongoing efforts with North Korea. Inasmuch as work on the RNEP was authorized and funded in last year's National Defense Authorization Act, I believe that North Korea already has factored the RNEP into its calculations and will not vary those calculations depending on how Congress acts on this element of the FY2004 budget request.

Thank you for your important work on these issues and please do not hesitate to ask if I can be of further assistance in the future.

Sincerely,

COLIN L. POWELL.

DEPARTMENT OF DEFENSE,
U.S. Strategic Command.

Hon. JOHN W. WARNER,
Chairman, Senate Armed Services Committee,
Russell Senate Office Building, Washington,
DC.

DEAR MR. CHAIRMAN, The Nuclear Posture Review put in motion a major change in the role of our nuclear forces. As we continue to

strategize the most effective methods of addressing new and emerging threats to our National Security, it is an inherent responsibility of the Department of Defense to not only reevaluate the capabilities of our nuclear arsenal, but to thoroughly analyze the potential of advanced concepts that could enhance our overall deterrent posture.

U.S. Strategic Command is interested in conducting rigorous studies of all new technologies, and examining the merits of precision, increased penetration, and reduced yields for our nuclear weapons. The nation needs to understand the technical capabilities of threats under development by potential adversaries and to thoroughly explore the range of options available to the United States to deter or defeat them. Once we complete the precise engineering analyses necessary to validate facts related to nascent advanced concepts, the results of the research will enable dispassionate, fact-based discussions on very important defense and policy issues.

The findings of the Nuclear Posture Review were strongly endorsed by the Service Chiefs. Repealing Section 3136 of Fiscal Year 1994 NDAA (42 U.S.C. 2121) will allow U.S. Strategic Command the ability to evaluate the full range of advanced concepts through research and development activities.

Your support in repealing the prohibition on low-yield research and development for nuclear weapons is greatly appreciated. A similar letter has been sent to the Ranking Member of your committee.

Sincerely,

J.O. ELLIS,
Admiral, U.S. Navy,
Commander.

DEPARTMENT OF THE AIR FORCE,
OFFICE OF THE CHIEF OF STAFF,
Washington, DC, May 8, 2003.

Hon. JOHN W. WARNER,
Chairman, Committee on Armed Services,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN, I seek your support for repealing Section 3136 of the Fiscal Year 1994 National Defense Authorization Act (42 U.S.C. §2121). This section of the law, commonly referred to as the Precision Low-Yield Weapon Development (PLYWD) limitation, prohibits the Department of Energy and by extension the Air Force from conducting any research and development on a new nuclear weapon design with a yield of five kilotons or less.

Research and development of new low-yield weapon concepts is required in order to evaluate all potential options to meet current and emerging combatant commanders' requirements. Low-yield nuclear weapons currently in the stockpile simply are not suited to satisfy all these requirements.

We are pursuing full rescission of this section of the law instead of just an amendment. A partial repeal that only permits basic research and development with no prospect for production would effectively have the same impact as the current law.

A similar letter has been sent to the Ranking Minority Member of your Committee and to the Chairman and Ranking Minority Member of the House Armed Services Committee.

Sincerely,

JOHN P. JUMPER,
General, USAF,
Chief of Staff.

**NUCLEAR WEAPONS LIFE CYCLE MANAGEMENT
PROCESS**

Phase 1—Concept Study.
Phase 2—Feasibility Study.
Phase 2A—Design Definition & Cost Study.
Phase 3—Full Scale Engineering Development.

Phase 4—Production Engineering.

Phase 5—First Production.

Phase 6—Quantity Production & Stockpile Maintenance Evaluation.

Phase 7—Retirement & Dismantlement.

Mr. WARNER. Mr. President, I oppose the amendment.

Research on precision low-yield nuclear weapon design is prudent in today's national security environment. Why would we want to prevent any type of research on weapons that might contribute to improving our national security? Authorizing the research does not authorize the production, testing, or deployment of a low-yield nuclear weapon. Congress reserves the right to decide that as a separate matter, should such a step be requested by this or any future Administration.

I have received three letters on this matter: two from top military leaders, Admiral James Ellis, Commander of U.S. Strategic Command and General John Jumper, Chief of Staff to the U.S. Air Force, and one from Secretary of State Colin Powell. All three of these distinguished leaders urged support for repealing the ban on low-yield nuclear weapons research.

In the current international environment, with many new unexpected threats, it is prudent to allow research on low-yield nuclear weapons to learn whether such weapons could add to the deterrent value of our nuclear force. A repeal of the ban on low-yield nuclear weapons research and development would permit the scientists and engineers at our national laboratories to consider whether these types of weapons are feasible and for what purpose. For instance, could such a weapon destroy a laboratory with biological and chemical agents without discharging them as a conventional weapon would do? What would be the collateral effect?

I do not agree with those who assert that even allowing this research to go forward would undermine our nuclear non-proliferation efforts. The United States is steadfast in its determination to prevent nuclear proliferation through many means including diplomacy, multilateral regimes to control the export of sensitive technologies, and interdiction of illegal exports. The U.S. also has a proven record of nuclear reductions.

Secretary Colin Powell confirmed this view in his letter sent to me on May 5th, 2003. In that letter, Secretary Powell stated: "I do not believe [repealing the ban on low-yield nuclear weapons research and development] will complicate our ongoing efforts with North Korea."

Over the past decade—while the current prohibition on this type of research has been in place—the United States has taken thousands of nuclear weapons out of the active stockpile, abided by a moratorium on underground nuclear tests, designed no new nuclear weapons, and refrained from research on low-yield nuclear weapons.

Some might argue that these activities served the purpose of encouraging

other countries not to develop or proliferate nuclear weapons. But let's examine the record.

Over the past decade, India and Pakistan tested nuclear weapons for the first time. Other nations have continued to seek nuclear weapons capabilities, including Iraq, Iran and North Korea. And many nations are pursuing chemical and biological weapons capabilities. I believe this shows that other nations make decisions about whether or not to acquire nuclear and other WMD capabilities based on their assessment of their own national security need—not based on U.S. action in this area. The argument that some make that if U.S. refrains from certain types of activities, others will follow, just does not stand the test of time.

Some would also argue the authorizing of this research would lower the nuclear threshold. I disagree. As Ambassador Linton Brooks, Administrator of the Nuclear Security Administration, testified before the Strategic Forces Subcommittee, on April 8, 2003, the "[n]uclear threshold is awesomely high." If wars of the future are about winning hearts and minds, about liberating rather than conquering, then the threshold for using nuclear weapons remains very high indeed. But as long as we maintain a nuclear deterrence force, we would be remiss if we did not keep it safe, secure and reliable, and if we did not maintain our research capabilities both for ourselves and to understand what other countries might be exploring.

It is worth noting that the United States had a large number of low-yield nuclear weapons in our inventory during the '50s, '60s, and '70s which have now been removed from the inventory. During each of these decades there were significant national security challenges to the United States. None of those challenges came close to reaching the nuclear threshold, notwithstanding the availability of low-yield nuclear weapons.

We have a responsibility to ensure the safety and security of all Americans. We should not place artificial limits on the intellectual work of our gifted scientists to explore new technologies, to understand what is possible as well as what potential adversaries could be exploring. Should threats emerge which cannot be deterred or destroyed with conventional weapons, our President must have other options available to protect the citizens of the United States, our interests and our allies. This has been the policy of the United States for almost sixty years.

The provision in the Senate bill merely permits the research that will inform future decisions as to whether such weapons would enhance the national security of our country overall. It does not prejudice how Congress would decide that question in the future. Let us not fear greater knowledge to inform our future decisions.

I urge my colleagues to oppose this amendment.

The ACTING PRESIDENT pro tempore. The Senator from Massachusetts is recognized.

Mr. KENNEDY. Mr. President, this issue is as clear as any issue ever gets. You are either for nuclear war or you are not. Either you want to make it easier to start using nuclear weapons or you don't.

Our conventional weapons already have vast power and accuracy. We can make them even more powerful. No one at the Pentagon and no one in the administration has given us any examples—none at all—of cases where a smaller nuclear weapon is needed to do what a conventional weapon cannot do.

For half a century, our policy has been to do everything we possibly can to prevent nuclear war, and so far we have succeeded. The hardliners say things are different today: A nuclear war won't be so bad if we just make the nukes a little smaller. We will call them mini-nukes. They are not real nukes. A little nuclear war is OK.

That is nonsense. Nuclear war is nuclear war is nuclear war. We don't want it anywhere, anytime, anyplace. Make no mistake, a mini-nuke is still a nuke. Is half of Hiroshima OK? Is a quarter of Hiroshima OK? Is a little mushroom cloud OK? That is absurd.

The issue is too important. If we build it, we will use it. No Congress should be the Congress that says let's start down this street when it is a one-way street that can lead only to nuclear war.

Some may say that smaller weapons are less dangerous than the larger weapons already in our arsenal. But these nuclear weapons are actually more dangerous, because they are smaller, therefore easier to steal and smuggle. The Administration's goal is to make them more usable by lowering the thresholds for the first use of nuclear weapons.

Some may say we can't build new weapons, and haven't built them in years. To that I ask why do we need to build new weapons when we have over six thousand warheads in our inventory? It's enough to destroy the world at least ten times over, and leave the world in nuclear winter. It would take only ten nuclear weapons to paralyze the United States.

Some believe our non-proliferation efforts do not stop North Korea or Iran from developing nuclear weapons of their own. No one argues that these weapons have the capability to stop North Korea. But why not target them now with our existing nuclear weapons. This is not an argument for new nuclear weapons.

Some argue that current law ties the hands of the Pentagon. But there is no military requirement for these weapons, just hypothetical situations proposed by the other side. No one can point to an actual situation where we would use these weapons.

Some may argue that we need to do this research to go after Al Qaida and other asymmetric threats. How can we

consider using these weapons when we don't know where our adversaries are? Al Qaida is active in Indonesia, Saudi Arabia, Canada, and Germany. Would we use these low-yield weapons against these countries?

Some of my colleagues on the other side of the aisle believe that we have reduced our weapons while other countries have begun nuclear weapons programs. They say no one is following our lead and that since 1992, we have stopped testing while China, France, India, and Pakistan have continued to test. On the contrary, there have been no tests in the past five years. Four states who were nuclear states have come under the non-proliferation treaty as non-nuclear states: South Africa, Belarus, Kazakhstan, and the Ukraine.

They think we need to have our smartest people thinking about low-yield nuclear weapons. Lifting the ban would give them their freedom to indulge in intellectual curiosity, and it is more likely to yield a way to stop proliferation. However the research banned by this amendment is an offensive, not defensive capability. This is research leading to the development and the production of weapons, not pure intellectual exploration of advanced concepts. The Spratt amendment prohibits the construction of prototypes.

Some will argue that we cannot be confident that our weapons will work, without the development of these new weapons. According to the National Academy of Sciences (July 2002), "The United States has the technical capabilities to maintain confidence in the safety and reliability of its existing nuclear weapons stockpile under the CTBT, provided that adequate resources are made available to the Department of Energy's nuclear weapons complex and are properly focused on this task."

My colleagues believe that we still retain the right to authorize and appropriate funds for nuclear weapons systems. We should be allowed to think about these weapons to prevent others from developing this capability. But no one else is developing these weapons; if we start, others may follow. We may be igniting a new nuclear arms race. Nothing in law prohibits our scientists from doing research on our adversaries' capabilities.

Finally, some say we should develop these weapons because we cannot use the existing weapons, because they are too large. They say killing millions of Iraqis is too many. If we use a lower-yield weapon, we can deter Saddam Hussein. But this is just arguing for hundreds of thousands dead, rather than millions. If we really want a surgical strike capability, then we should develop a conventional alternative.

Mr. President, I yield back my remaining time to the Senator from Michigan.

The ACTING PRESIDENT pro tempore. The Senator from Michigan.

Mr. LEVIN. Mr. President, the provisions in this bill relating to the development of new nuclear weapons mark a major and a very dangerous shift in American policy. Proliferation of weapons of mass destruction is the greatest threat we face. Uncorking the nuclear bottle to develop new and modified nuclear weapons goes in the opposite direction of the commitment we made when we signed the non-proliferation treaty. We are a party to that treaty.

It has been said on this floor that North Korea is a party to the non-proliferation treaty, and they have to live up to it. They got something in return for their signature. They did, indeed. They got our signature, and our signature committed us to end the nuclear arms race.

Uncorking the nuclear bottle, which these provisions do, makes a mockery of our argument to other countries around the world that they should not go nuclear.

Just think about some of the headlines in the last few months about North Korea: "U.S. Assails Move by North Koreans to Reject Treaty." That is the nonproliferation treaty to which we are a signatory, too, that commits us to end the nuclear arms race, not to start a new chapter in the nuclear arms race. So we assail their move.

Another headline: "Military Action Possible, U.S. Warns North Korea." We take their move toward nuclear weapons so seriously that we have actually suggested we may initiate military action to stop them from moving in a nuclear direction. Yet we, if these provisions stay, are moving in that same direction. We have told Iran the same thing. We have urged Russia: Do not help Iran go nuclear. Do not supply them with any materials which they might use to go nuclear.

Yet in these provisions in this bill, we would, if they stay in the bill, lift a prohibition that exists in current law in the United States which prohibits the research and development on nuclear weapons that could lead to the production of new nuclear weapons. That is what the so-called Spratt-Furse language does. It prohibits research and development on nuclear weapons which could lead to their production. That is the language which was stricken by a 15-to-10 vote in the Armed Services Committee, and that is the language which the amendment offered by the Senators from California and Massachusetts would restore to the law.

We have a special responsibility for a lot of reasons. No. 1, we are the leader. We have to live up to what we say we want others to do. But we are also the only country that has actually used nuclear weapons. We say we are determined to stop the spread of nuclear weapons. Are we serious about that? If we have a prohibition in our law which says we will not do research and development on nuclear weapons which could lead to their production, are peo-

ple around the world going to take us seriously that, in fact, we want to stop other countries from going nuclear, gaining nuclear weapons, that our major fear is the proliferation of nuclear weapons if we take the position that an existing prohibition in law on research and development that could lead to production of those weapons is going to be lifted by us?

We have a special responsibility. This is a security issue for us. Are we really more secure in the world where that nuclear bottle is uncorked and uncorked by us, by lifting an existing ban in our law?

Nuclear weapons cannot be seen as just another option for warfare. They cannot be seen as usable as warfighting weapons. Yet the administration is moving to change the historic position of one U.S. administration after another by looking to make nuclear weapons more usable, not just as another capability but usable in warfighting, and that is the language which has been quoted on this floor.

The language of the head of the nuclear weapons program talks about the desirability of designing weapons which are usable. That is his word, "usable." One administration after another has gone in the other direction.

The specific weapons that are covered by the ban are so-called low-yield nuclear weapons. What a misnomer that is for reasons so many of us have given on the floor this afternoon. Five kilotons, which is the definition of a low-yield weapon, is roughly one-third the size of the nuclear bomb that was used on Hiroshima which immediately killed 140,000 people, left hundreds of thousands radiated and injured in other ways. And by the way, 140,000 people was almost half the population of Hiroshima.

Nuclear weapons are weapons of mass destruction, whether they are a third the size of the bomb that was used at Hiroshima or 20 times the size or 40 times the size. They are weapons of mass destruction.

The administration seeks to repeal a ban on research and development which could lead to the production of a weapon of mass destruction. That is the bottom line, and the statement by the Administrator of the National Nuclear Security Administration, Mr. Linton Brooks, makes it very clear that there is an intent here to develop weapons which are "usable." That is not my word. That is not the word of the supporters of the amendment, the Senator from California and the Senator from Massachusetts. That is the testimony of the Administrator of the National Nuclear Security Administration who said that he has a bias in favor of things—referring to weapons—that might be usable, referring to the so-called low-yield nuclear weapons.

It is more than research. In this law which exists, unless we repeal it, are prohibitions on research and development. The Deputy Assistant Secretary of Defense in charge of these programs,

Mr. Celec, who has also been quoted today, specifically said the following. Fred Celec, Deputy Assistant to the Secretary of Defense for Nuclear Matters, made clear that:

The administration wants the weapon and it is moving forward.

He is talking about a weapon that could be a deep penetrator. It could be a so-called bunker buster, but also it could be a low-yield weapon. He is not specific. If a hydrogen bomb can be successfully designed to survive a crash through hard rock and still explode, it will ultimately get fielded, Celec said in an interview with the Mercury News. The San Jose Mercury News in 2003 ran that story, and we have confirmed that, in fact, that is what he said. He was not misquoted. So we have the Deputy Assistant to the Secretary of Defense for Nuclear Matters saying that if a hydrogen bomb can be designed to penetrate hard rock and still explode, "it will ultimately get fielded."

That is the path the language in the bill repealing the so-called Spratt amendment would take us down.

All of this is being done in the context of what is called the Nuclear Posture Review which was completed by the administration in December of 2001. This was the first step in an effort to develop new usable nuclear weapons. The Nuclear Posture Review is the basis for a new strategic policy that is described in a March 23, 2002, Washington Post article:

Would give U.S. Presidents the option of conducting a preemptive strike with precision-guided conventional bombs or nuclear weapons.

That is the policy shift which occurred back then. That is the environment in which we are determining whether or not to lift a prohibition on research and development of new nuclear weapons.

That Nuclear Posture Review walks away from a longstanding policy that the United States will not be the first to use nuclear weapons against a non-nuclear state. That Nuclear Posture Review, again according to the Washington Post article, specifically identifies countries that could be targets, including North Korea, Iran, Syria, and Libya.

The legislative proposal that accompanied the administration's request to repeal the Spratt-Furse prohibition on low-yield nuclear weapons says the following—that is the proposal that accompanied the request that the committee voted to approve by a 15-to-10 vote. This is what the administration's language says:

In this regard, the . . . Nuclear Posture Review urged exploration of weapons concepts that could offer greater capabilities for precision, earth penetration—

And other things.

The justification concluded that the Spratt-Furse law impedes this effort.

It does indeed.

Without the Spratt-Furse law, there is no legal impediment to the development, testing, production, or deployment of new, usable nuclear weapons.

Will that impediment be removed? That is the issue we are going to decide tonight. At a time when we are trying to dissuade other countries from going forward with nuclear weapons development, when we strongly oppose North Korea's pulling out of the Nuclear Non-Proliferation Treaty, when we are spending over a billion dollars to prevent the spread of nuclear weapons material and technology, it seems to me that lifting this prohibition on the research and development of nuclear weapons which could lead to their production sends a terrible message. We are telling others not to go down the road to nuclear weapons, but instead of being a leader in the effort to prevent the proliferation of nuclear weapons, we would be recklessly driving down that same road.

In short, the United States should not follow a policy that we do not tolerate in others. We live in a dangerous world where proliferation of weapons of mass destruction is the greatest threat we face. The answer is not to make the world more dangerous by our own actions.

If Senator ALLARD wishes to alternate, there would then be someone to speak from his side. If not, I know Senator FEINSTEIN is next in line.

I yield the floor.

The ACTING PRESIDENT pro tempore. The Senator from California.

Mrs. FEINSTEIN. Mr. President, I thank all of those who have come to the floor to speak. I think this is a very important debate because I think we are at a crossroad.

Clearly, this Defense authorization bill, when coupled with the repeal of the Spratt-Furse amendment, opens the door to new nuclear development. In my tenure in the Senate, in either a classified or unclassified session, I have never had any information provided that this is necessary or that there is a military requirement to do so.

One of the reasons this should not be repealed is, when it is combined with other provisions in the Defense authorization bill, one can really see where this is going. For example, this bill authorizes \$15 million for the study of the robust nuclear earth penetrator. It authorizes \$6 million for advanced nuclear weapons concepts. Then if we look at page 448 of the report, we see that the committee recommends a provision that would require the Secretary of Energy to achieve and thereafter maintain a readiness posture of 18 months for resumption by the United States of underground nuclear tests. This moves up a 3-year period to 18 months.

So if we combine all of these, it is very clear to me that where this country is going is toward the resumption of nuclear development.

I wish to rebut a couple of arguments. It was said that we need capa-

bilities for any possible contingency, and I could not agree more. But if we read Spratt-Furse, it allows research but it disallows development and production. In other words, it allows research on existing systems; it does not allow research on new systems. Consequently, if Spratt-Furse is repealed, what automatically is being said is that we begin study, research, and testing on new systems. If research is promising and there is a military need, the administration can come back and ask for specific authorization. As I said, there is no specific military requirement for these weapons that we know about.

It has also been said today that developing low-yield weapons is important to preserve U.S. credibility in determining threats. In fact, we already have over 6,000 nuclear weapons in our stockpile, and we already have a warhead that can be dialed down to 1 kiloton or less. So what is the need to go to 5 kilotons of new development? We do not know because it has never been presented to us.

We also have an overwhelming conventional military advantage over any other country. We have conventional bombs that range in size from 500 to 5,000 pounds. A 5,000-pound bunker buster, like the guided bomb unit 28B, is capable of penetrating up to 20 feet of reinforced concrete or 100 feet of earth. This was used with success in Operation Enduring Freedom in Afghanistan.

To my knowledge, we have never been told that this is inadequate or that there is no other way, other than a nuclear way, to get at a deep bunker; we have never been told that our intelligence does not work or you cannot plug an air hole or you cannot use a number of conventional bunker busters to achieve a similar result.

We have been told that repealing Spratt-Furse will not affect proliferation because others will seek nuclear weapons anyway. Well, our standing in the world, I have thought, really rests on our moral case, our sense of justice, our sense of equity, our freedom. In fact, since 1992, the United States has not developed new weapons and others have followed suit. Russia has not tested since then and has not developed new weapons. China stopped testing. India and Pakistan have not tested for 5 years and are not currently developing new weapons. But we can be sure, when it is learned that the United States is going to go ahead with new studies, new feasibility tests on up to 5-kiloton new nuclear warheads, that others will follow suit.

I believe U.S. restraint is, in fact, an important element of our nonproliferation effort.

This is a very big vote that is before us right now because the only reason to repeal Spratt-Furse is to signal that we are, in fact, going to develop a new generation of nuclear weapons. This is a horrible mistake. I think it is a mistake morally. I think it is a mistake

militarily. I do not know a commander who would want to send his troops onto a battlefield where a 5-kiloton nuclear weapons device had been utilized. So why are we doing this? It makes no sense to me. I hope this body would vote against it.

I leave with one point. A 1-kiloton weapon detonated at a depth of 20 to 50 feet would inject more than 1 million cubic feet of radioactive debris and form a crater about the size of ground zero in New York. If we fail to repeal the repeal, we will allow research to go ahead to develop up to five times that when we have conventional weapons that can do the job as well. I have very strong feelings on this subject.

I thank Senator KENNEDY, Senator LEVIN, and all Members who have come to the floor to speak in support of our amendment.

I yield the floor.

The PRESIDING OFFICER (Mr. TALENT). The Senator from Colorado.

Mr. ALLARD. I think we are getting to the point where we are ready to wrap up debate. I will make a few comments and we will move to table and have a vote in a relatively short period of time. I am warning everyone we are getting close to a vote.

I thought I would take a few moments to review some of the comments made by individuals in the administration about the need to allow for research, at least, and study as far as the low-yield nuclear weapons were concerned.

I rise in opposition to the Kennedy-Feinstein amendment. Let me read from a letter from Secretary of State Powell, dated May 5, 2003.

I am writing to express support for the President's FY2004 budget request to fund the feasibility and cost study for the Robust Nuclear Earth Penetrator (RNEP), and to repeal the FY1994 legislation that prohibits the United States from conducting research and development on low yield nuclear weapons. I do not believe that these legislative steps will complicate our ongoing efforts with North Korea.

This is a statement from our Secretary of State.

ADM Ellis, U.S. Navy, had this to say in a letter to the chairman:

The nation needs to understand the technical capabilities of threats under development by potential adversaries and to thoroughly explore the range of options available to the United States to deter or defeat them. Once we complete the precise engineering analyses necessary to validate facts related to nascent advanced concepts, the results of the research will enable dispassionate, fact-based decisions on very important defense and policy issues.

If you repeal the law on low-yield nuclear weapons, you end up producing nuclear weapons which will cause less collateral damage if used and, therefore, the United States is more likely to use that. That is the assertion.

First, in response to that, NNSA cannot produce or deploy a new nuclear weapon without an authorization and appropriation from Congress. Second, there have been thousands of deployed

low-yield nuclear weapons during the 1950s, 1960s, 1970s, 1980s, and today, and that has not lowered the nuclear weapon threshold. Nuclear weapons are still a very high threshold that only the President can initiate.

On April 8, 2003, Admiral James Ellis said:

... it's not clear to me there is a direct linkage between the size of the weapons and the awesome responsibilities embodied in that decision.

Ambassador Linton Brooks quoted, as then acting director of NNSA, in an April 8, 2003 hearing:

Is there a logic to saying that we have older low-yield weapons, but that we now know we are not going to ever want to produce new low-yield weapons. Now to some extent I admit we are talking about—since I'm not going to develop or produce anything without the permission of the Congress and if the Congress decided to give me permission, it could modify the ban . . .

Now, we are looking at both administrations that have basically taken the position that we need to have a nuclear response to either chemical or biological weapons or weapons of mass destruction.

On December 7, 1997, President Clinton issued some guidelines which would permit nuclear strikes after enemy attacks involving chemical or biological weapons, which was reported widely at that time.

Finally, I point out some language and remind my colleagues we have specific language in the bill, and I will again repeat that language:

Nothing in the repeal made by subsection (a) shall be construed as authorizing testing, acquisition, or deployment of a low-yield nuclear weapon.

The issue is clear. I am now willing to move forward with the vote.

Mrs. FEINSTEIN. I ask unanimous consent to add Senator BIDEN as a cosponsor.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ALLARD. I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. ALLARD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ALLARD. For Members' information, we are going to proceed to a vote. I want Members to understand we are going to hold this vote open an extra length of time to accommodate those who are expecting the vote to occur at 7:45. This will allow Members who are anxious to get home early tonight to leave early, and then we will keep the vote going later on.

Having made that announcement, I will move to table.

Mr. LEVIN. Will the Senator withhold for just a moment.

Mr. ALLARD. I understand we have some time to be yielded back on both sides.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Mr. President, Members all over town have been expecting this vote to occur at 7:45, so I hope the leader will allow us to have the vote drag on for a little while to make sure our people get back.

Mr. ALLARD. I have contacted the leader on the Republican side. He is expecting us to leave this open to somewhere around 8:10.

Now we both have time to yield back.

Mr. LEVIN. I yield the remainder of my time.

Mr. ALLARD. I yield the remainder of the time on the Republican side.

The PRESIDING OFFICER. All time is yielded back.

Mr. ALLARD. Now I move to table the Kennedy-Feinstein amendment. I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

There is a sufficient second.

The question is on agreeing to the motion. The clerk will call the roll.

Mr. MCCONNELL. I announce that the Senator from Mississippi (Mr. LOTT) and the Senator from Ohio (Mr. VOINOVICH) are necessarily absent.

Mr. REID. I announce that the Senator from North Carolina (Mr. EDWARDS), the Senator from Florida (Mr. GRAHAM), the Senator from Hawaii (Mr. INOUE), and the Senator from Massachusetts (Mr. KERRY) are necessarily absent.

I further announce that, if present and voting, the Senator from Massachusetts (Mr. KERRY) would vote "aye."

The result was announced—yeas 51, nays 43, as follows:

[Rollcall Vote No. 186 Leg.]

YEAS—51

Alexander	DeWine	McConnell
Allard	Dole	Miller
Allen	Domenici	Murkowski
Bayh	Ensign	Nelson (NE)
Bennett	Enzi	Nickles
Bond	Fitzgerald	Roberts
Brownback	Frist	Santorum
Bunning	Graham (SC)	Sessions
Burns	Grassley	Shelby
Campbell	Gregg	Smith
Chambliss	Hagel	Snowe
Cochran	Hatch	Specter
Coleman	Hutchison	Stevens
Collins	Inhofe	Sununu
Cornyn	Kyl	Talent
Craig	Lugar	Thomas
Crapo	McCain	Warner

NAYS—43

Akaka	Dodd	Lieberman
Baucus	Dorgan	Lincoln
Biden	Durbin	Mikulski
Bingaman	Feingold	Murray
Boxer	Feinstein	Nelson (FL)
Breaux	Harkin	Pryor
Byrd	Hollings	Reed
Cantwell	Jeffords	Reid
Carper	Johnson	Rockefeller
Chafee	Kennedy	Sarbanes
Clinton	Kohl	Schumer
Conrad	Landrieu	Stabenow
Corzine	Lautenberg	Wyden
Daschle	Leahy	
Dayton	Levin	

NOT VOTING—6

Edwards	Inouye	Lott
Graham (FL)	Kerry	Voinovich

The motion was agreed to.

Mr. WARNER. Mr. President, I move to reconsider the vote.

Mr. ALLARD. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. WARNER. Mr. President, we appreciate the cooperation of all Senators. We were able to accommodate one Senator who had a very serious problem. That is achieved and we are now completed. I believe the Senator from Rhode Island is to be recognized for the purpose of laying down his amendment.

The PRESIDING OFFICER. Under the previous order, the Senator from Rhode Island is recognized.

AMENDMENT NO. 751

Mr. REED. Mr. President, I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Rhode Island [Mr. REED], for himself, Mr. LEVIN, and Mr. FEINGOLD, proposes an amendment numbered 751.

Mr. REED. Mr. President, I ask unanimous consent that the reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

(Purpose: To modify the scope of the prohibition on research and development of low-yield nuclear weapons)

Strike section 3131 and insert the following new section:

SEC. 3131. MODIFICATION OF SCOPE OF PROHIBITION ON RESEARCH AND DEVELOPMENT OF LOW-YIELD NUCLEAR WEAPONS.

(a) MODIFICATION.—Section 3136 of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103-160; 107 Stat. 1946; 42 U.S.C. 2121 note) is amended by striking "research and development" each place it appears and inserting "development engineering".

(b) CONFORMING AMENDMENTS.—(1) The caption for subsection (c) of that section is amended by striking "RESEARCH AND DEVELOPMENT" and inserting "DEVELOPMENT ENGINEERING".

(2) The heading for that section is amended by striking "RESEARCH AND DEVELOPMENT" and inserting "DEVELOPMENT ENGINEERING".

The PRESIDING OFFICER. Under the previous order, the Senator from Virginia is recognized to offer a second-degree amendment. The Senator from Virginia.

AMENDMENT NO. 752 TO AMENDMENT NO. 751

Mr. WARNER. Mr. President, I send to the desk an amendment in the second degree and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Virginia [Mr. WARNER] proposes an amendment numbered 752 to amendment No. 751.

Mr. WARNER. Mr. President, I ask unanimous consent that the reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

In lieu of the matter proposed to be inserted, insert the following:

SEC. 3131. REPEAL OF PROHIBITION ON RESEARCH AND DEVELOPMENT OF LOW-YIELD NUCLEAR WEAPONS.

(a) REPEAL.—Section 3136 of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103-160; 107 Stat. 1946; 42 U.S.C. 2121 note) is repealed.

(b) CONSTRUCTION.—Nothing in the repeal made by subsection (a) shall be construed as authorizing the testing, acquisition, or deployment of a low-yield nuclear weapon.

(c) LIMITATION.—The Secretary of Energy may not commence the engineering development phase, or any subsequent phase, of a low-yield nuclear weapon unless specifically authorized by Congress.

The PRESIDING OFFICER. The Senator from Rhode Island.

Mr. REED. Mr. President, for over 50 years, the United States has been in the vanguard in both urging and acting to delegitimize the use of nuclear weapons. Today, the Bush administration is implementing a departure from this bipartisan policy of arms control by adopting measures that will lower the threshold for the use of nuclear weapons.

Dissatisfaction with America's nuclear policy by conservatives was evident even before George W. Bush became President. One of the more dramatic examples of this was the rejection of the Comprehensive Nuclear Test-Ban Treaty by the Senate in 1999. A particularly revealing aspect of that vote was the opposition to a proposal to put the treaty aside rather than to formally defeat it. Deferral would have given a future President the ability to renegotiate aspects of the treaty, such as verification, that were specifically criticized. A combination of ideological and political motivations forced a vote that further weakened efforts at arms control. Indeed, today the defeat of the Comprehensive Nuclear Test-Ban Treaty still lingers as something that I think is a serious erosion of arms control throughout the world and our ability to influence other nations to refrain from testing and developing.

In a similar vein, Republicans in Congress enacted legislation that fixed the minimal number of launch vehicles and warheads in order to prevent the Clinton administration from initiating reductions through negotiations with the Russians. This legislation was quietly repealed when President George W. Bush announced his intention to conclude the Moscow treaty. The Moscow treaty seems to be the type of arms control treaty that conservatives can be comfortable with since it does not actually require the elimination or destruction of nuclear weapons by either side. I have heard today repeatedly discussions of how we are destroying nuclear weapons. In fact, under the Moscow treaty, we are simply redesignating nuclear weapons. We are calling them operational and nonoperational. We are not destroying nuclear weapons.

The Bush administration not only accepted these precedents, but rapidly and deliberately built upon them. The

President quickly announced the withdrawal of the United States from the ABM Treaty. Here again, there was scant attention paid to the possibility of negotiating changes with the Russians in order to pursue the development of an antimissile system without jettisoning the ABM Treaty. The ABM Treaty has been a long-time target of the right wing. President Bush's decision was as much about appeasing a powerful component of his political base as it was a reflection of strategic thinking.

The President has made it clear that he will not pursue further negotiations under the START process with the Russians. He is content to let the Moscow treaty stand as the beginning and the end of his arms control initiatives.

The most effective nonproliferation program, the Cooperative Threat Reduction Program, was greeted initially by the Bush administration with skepticism. The program was placed on hold for the first year of the administration while the program was under review. The program was delayed an additional year when the administration could not make the certifications necessary for the program to proceed. The program survived the review and the certification delay but 2 years was spent on justifying the program rather than aggressively eliminating weapons and weapons material.

All of this was prelude to the publication of the Nuclear Posture Review in December of 2001. The review is classified and the administration provided only a cursory nonclassified briefing. Public comments by the administration suggest the major shifts in policy included in the review.

For the first time, the Nuclear Policy Review indicates that the United States is prepared to use nuclear weapons against nonnuclear nations that are not aligned with a nuclear power. Previously, the focus of our policy was to respond to the nuclear potential of other nuclear powers and their allies as a means of deterring the use of nuclear weapons. Today, the United States is contemplating the use of nuclear weapons against nations that do not possess nuclear weapons. In so doing, the NPR, the Nuclear Posture Review, blurs distinctions between conventional and nuclear weapons.

Instead of trying to place nuclear weapons beyond use or at least severely restricting their use to the deterrence of an attack by a nuclear power, the NPR makes them just one more tool in our tool kit. In so doing, it mischaracterizes the horrific effects of nuclear weapons; trying to suggest that they are a little bit more than a conventional weapon, when they are of a dimension and scale that is beyond the contemplation of anyone who has used conventional weapons.

The NPR maintains the current size of the stockpile of nuclear weapons. Despite the end of the cold war, the dissolution of the Soviet Union and the emergence of a democratically elected

government in Russia, the administration continues to maintain thousands of warheads in the stockpile.

The NPR holds out the possibility of the resumption of nuclear testing, either to maintain the current stockpile or to develop new types of nuclear weapons. Budget requests to fund the production of hundreds of new plutonium pits per year, a necessary component of a nuclear weapon, are included in this budget.

Requests to undertake the designs of new weapons if needed and to shorten the time necessary to initiate and conduct a nuclear test are included in the budget proposals, and all of them strongly suggest that testing could go well beyond the need to maintain the existing stockpile.

Coupled with the rejection of the Comprehensive Nuclear Test-Ban Treaty, the NPR sent a disturbing signal that we would once again undertake a testing program. Such a program may very well be imitated by other nations, either through perceived need or as a means to maintain their prestige in the nuclear club. In any case, this, too, would further weaken the restraints against the use of nuclear weapons.

In the context of these dramatic changes in policy, rejection of the comprehensive test ban treaty and a new nuclear policy review that blurs the distinction between conventional and nuclear weapons, the administration proposed last year to begin the design of a robust nuclear earth penetrator to use against hard and deeply buried targets. This weapons would modify an existing nuclear device. In essence, the kinetic package already in the stockpile would come out of inventory and the key work would involve the design of a casing that could penetrate the proper depth for the weapon.

The first point to be made is that the existing weapons being considered are quite large, on the order of several hundred kilotons to over 1 megaton. For a frame of reference, the weapons dropped on Hiroshima and Nagasaki were in the range of 14 to 21 kilotons. Thus, the smaller of these bunker busters is roughly 25 times the size of the bombs dropped on Japan. These weapons will bust more than a bunker. The area of destruction will encompass an area the size of a city. They are really city breakers, not bunker busters.

A further point is the fact that conventional munitions have substantially increased their precision. We have seen that in Iraq rapidly and effectively. Although they have not achieved the ability of flying through an open door and taking the elevator down to the bunker command center, increased precision means enhanced ability to target and destroy entrances and the communication network of a command center or other sensitive target.

We have much better capacity today with conventional weapons, and many would argue these conventional weapons could effectively deal with many, if not all, of these potential targets.

Finally, the recent fighting in Iraq presented our forces with just the type of targets that the Robust Nuclear Earth Penetrator is envisioned to engage; deeply buried command centers and possible storage areas for weapons of mass destruction. From preliminary reports and from casual observations, it does not appear in any way that our military efforts were inhibited by the lack of a robust nuclear earth penetrator.

Last year Senate Democrats were able to delay spending money on a robust nuclear earth penetrator by requiring a report identifying the types of targets this weapon is designed to hold at risk and the employment policy for the robust nuclear earth penetrator. The classified report has been submitted and the administration is forging ahead.

Equally unsettling as the robust nuclear earth penetrator is the proposal by the administration to repeal the 1993 statutory ban on the research, development, testing, and production of low-yield nuclear weapons. Current law prohibits work on weapons with yields equal to or less than 5 kilotons. In attempting to justify this proposal, Ambassador Linton Brooks, Acting Director of the National Nuclear Security Administration, NNSA, stated before the Senate Armed Services Committee, that "we are seeking to free ourselves from intellectual prohibitions against exploring a full range of technical options."

Importantly, he did not justify this proposed work as a current military requirement. At present, there is no military requirement for a low-yield nuclear weapon. As I said before, really, low-yield nuclear weapon is a misnomer. These are still horrendous, horrific weapons. They might better be referred to as small apocalypses, not low-yield weapons.

More illustrative of the motivation behind the efforts is a subsequent statement of Ambassador Brooks at the hearing. The Ambassador declared:

I have a bias in favor of the lowest usable yield because I have the bias in favor of something that is the minimum destruction . . . I have a bias in favor of things that might be usable.

Let me commend the Ambassador for his candor and his responsiveness to the question because I think he has laid it out very accurately and very precisely and very well. No longer are we being motivated by a sincere and intense and consistent desire to try to avoid the use of nuclear weapons. We are trying to design weapons and produce weapons that we fully anticipate can be used. That is an extraordinary sea change in our policy. And it is a sea change that I think will reverberate around the world to our disadvantage, not to our security.

At the heart of the debate over these so-called low-yield nuclear weapons lies the observation, if not the fact, that the ability to limit collateral damage makes a weapon more likely to

be used. The advent of precision-guided munitions makes attacks on urban areas more acceptable to leaders. Would we have dropped a dumb bomb on Saddam Hussein's suspected hideouts in the crowded neighborhoods of Baghdad? It would have been a much tougher call.

In a similar fashion, as suggested by Ambassador Brooks' comments, developing low-yield nuclear weapons, small apocalyptic weapons, tilts the scales for use, not for restraint. That is a balance I think will again jeopardize our situation, not enhance it.

Proponents of this new policy with its bias in favor of things that are usable, in the Ambassador's terms, attempt to justify their position on several grounds. They argue arms control and nonproliferation have failed. We heard the arguments on the floor of the Senate all day long. They cite a litany of states that acquired nuclear weapons since the adoption of the Nuclear Non-Proliferation Treaty in 1968: India, Israel, Pakistan, South Africa, and apparently North Korea. But this litany must be placed in context. Forty years ago when the original nuclear powers—the United States, the Soviet Union, Britain, France, and China—had a monopoly on nuclear weapons, it was routinely assumed that proliferation would be rapid and irreversible. President Kennedy predicted in the early 1960s that an additional 25 countries might develop nuclear weapons within 10 years. This dire prediction did not come true because of efforts at arms control exemplified by the Nuclear Non-Proliferation Treaty.

Recently, this point was reiterated by Deputy Secretary of State Richard Armitage who stated: Instead of the 25 or so countries that President Kennedy once predicted, only a handful of nations possess nuclear weapons. Of course, we suspect many more countries have chemical or biological weapons, but still short of the scores that have been predicted in the past.

We have reached this state of affairs in no small part through the concerted efforts of many nations, agreements such as the Nuclear Non-Proliferation Treaty and Chemical Weapons Convention, organizations such as the IAEA and nuclear supply groups—these constitute a global security architecture that have served us satisfactorily and kept us safe.

Moreover, of the five states that have acquired nuclear weapons since 1968, three—Israel, India, and Pakistan—never signed on to the Nuclear Non-Proliferation Treaty. In retrospect, many look back and wish we could have urged them, convinced them, persuaded them, to sign on because it would have made their ascendancy to the nuclear ranks that much more difficult.

South Africa gave up its nuclear weapons and joined the regime as a nonpossessor. That leaves the very special case of North Korea which joined the NPT in 1985 and has been caught on

at least two occasions violating this obligation before its recent announced repudiation of the treaty.

Critics of the nonproliferation regime frequently fail to acknowledge that Argentina, Brazil, South Korea, and Taiwan ceased their suspected nuclear program in part because of the international law norm represented by the nonproliferation treaty.

Similarly, with the demise of the Soviet Union, the newly independent states of Belarus, Kazakhstan, and Ukraine found themselves in possession of nuclear weapons. All of them voluntarily relinquished their weapons in favor of joining the NPT. Their decision, at the urging of the United States and others, reaffirmed the norms of nonproliferation. Indeed, as recently as May, 2000, the United States reaffirmed this norm by joining the four other original nuclear powers in declaring their commitment to the "unequivocal undertaking" to eliminate nuclear arsenals.

That affirmation is in stark contrast to the legislation before us that seeks to expand and enhance our nuclear arsenal. Today, nonproliferation is being advocated by the United States as "do what I say," not "do what I do." Unfortunately, the United States is more often imitated than obeyed.

Last Saturday, Vladimir Putin's annual address was reported in the American media. According to one report:

[Putin] appeared to be responding to the Bush administration's new nuclear strategy, announced last year, when he said that Russia, too, was considering developing new variants of nuclear weapons.

President Putin declared, in his words:

I can inform you that at present the work to create new types of Russian weapons, weapons of the new generation, including those regarded by specialists as strategic weapons, is in the stage of practical implementation.

As the newspaper report further indicated:

[Analysts said he [Putin] appeared to be referring to Russia's efforts to modernize its nuclear arsenal and to develop low yield nuclear weapons.

At this point in the speech, the press reported that the "remark was greeted by applause."

I don't know how comfortable we all feel with the Russian Duma applauding the statement that Russia is considering modernizing their nuclear forces, potentially developing low-yield nuclear weapons. Indeed, it seems terribly ironic to me that as we urge support and help for the Russians to destroy their nuclear arsenal, they are simultaneously taking the path we are in trying to create and build a new, more modern arsenal.

Acknowledging the important role of the nonproliferation treaty, as I have over many decades, should not be equated with assuming the arms control regime is without shortcomings. A structure that was designed primarily to moderate the superpower confrontation between the United States and the

Soviet Union cannot be expected to adapt to the new threats and new technologies of the post-cold-war world without conscious and committed efforts led by the United States to deal with these new circumstances. Thus, it is incumbent on ourselves, the United States, not simply to walk away from this regime of arms control but to adapt it to the new contingencies, the new threats, the new environment of this new strategic world.

The consequences of the detonation of a weapon of mass destruction are so devastating that reliance on military means alone to deter or preempt such an event is shortsighted. Abandoning serious efforts at arms control will weaken, not strengthen, our efforts to protect the Nation. We must engage, again, I believe, in a concerted effort to strengthen these norms of non-proliferation, of nonuse—not weaken them, as this legislation suggests.

A second argument used by proponents of these policies is that it is just about research; no one would ever deploy these weapons. These advocates have not been paying attention to the Bush administration. These are the words of Fred Celec, Deputy Assistant to the Secretary of Defense for Nuclear Matters, in an interview with the San Jose Mercury News, talking in the context of the development of a “hydrogen bomb that can be successfully designed to survive a crash through the hard rock or concrete and still explode,” which is an earth penetrator. Mr. Celec concludes, in his words, if we can do it, “it will ultimately get fielded.”

So this is not about hypothetical research; it is not about a big science project, or training scientists. In the view of a very influential member of the Department of Defense, it is about getting weapons we can put in the field. I can't think of any weapon that we would field, that we would place in the hands of American military personnel, that we wouldn't test first. So we are also talking about testing.

These are grave—not just possibilities, but if you listen to the spokesman of the administration, these are right over the horizon. I think it is very disturbing. That is why I think we have to act here to exercise our judgment and our responsibility to ensure that our policy is consistent with the best interests of this country. I hope, through consideration of this amendment, we will do that.

A third point that seems implicit in many of the arguments that are made on behalf of these weapons is the notion that nuclear weapons can be designed so their use is, if not relatively benign, then at least tolerable.

As previously discussed, the proposed modification of existing weapons to create a robust nuclear earth penetrator is anything but benign or tolerable. It will pack an explosive punch at least 25 times that of Nagasaki or Hiroshima, and even if technology and the Congress allows for a smaller yield robust nuclear earth penetrator, its use will be devastating.

Sidney Drell, a noted physicist and arms control advocate, pointed out that even a 1-kiloton weapon, penetrating to 40 feet, would create a crater larger than the impact area at the World Trade Center and put about 1 million cubic feet of radioactive material in the air. Such radioactivity could last for many years and would likely be spread over a fairly large area by the prevailing winds. That is not a small, discrete weapon that plows into the ground with a little puff of smoke emanating. That is a devastating weapon.

A fourth rationale raised by proponents is that permission to develop low-yield nuclear weapons is necessary to train the next generation of nuclear scientists. This argument ignores the existence of thousands of nuclear weapons that are available for training purposes. The ban on low-yield nuclear weapons applies only to the fabrication of new weapons, not the dismantling and study of existing ones. Moreover, the idea that decades of arms control efforts would be cast aside simply to provide a training exercise should cause a more exhaustive search for other training opportunities rather than the creation of a new class of nuclear weapons. Or, at a minimum, it should prompt a careful exemption from the ban for the purpose of research, and not the wholesale repeal of the ban that is included in this legislation before us.

A fifth rationale advanced by supporters is the possible use of a low-yield nuclear device to attack a facility that contains biological or chemical agents. The theory is that the radiation can destroy the biological or chemical agents in addition to destroying the facility. But this rationale begs two questions. What will destroy the radiation emitted by the nuclear blast and why are precision-guided missiles not as suitable a response? Once again, this is the very specialized threat that may be dealt with by other means and is an attempt to deal with the possibility of chemical and biological exposure through the release of a definite radiological exposure. It is not a compelling reason to abandon the ban on low-yield nuclear weapons.

A final justification for the development of low-yield nuclear weapons is that it will act as a deterrent. Proponents argue that our existing nuclear weapons are so large that we are self-deterred from using them and our adversaries know this. But with new, low-yield weapons, our adversaries will have renewed concern that we will employ nuclear weapons.

Several points are in order. First, in the war on terror, our adversaries are unlikely to be deterred by any size nuclear weapon, due to their fanaticism and the practical problem of targeting them. In a confrontation with rogue states, the targeting problem is easier, but the use of nuclear weapons of any size presents difficult tactical problems.

Our doctrine of air superiority, information dominance, precision weapons,

and speed makes the use of nuclear weapons less attractive on military grounds since we plan for and anticipate the rapid destruction of enemy forces and the swift seizure of key political objectives. The use of nuclear weapons will likely slow us down and increase the cost, both short run and long run, of our operations.

In Iraq, we were confronted by a rogue state. We heard before the hostilities of the existence of deep underground facilities. We were told there were significant weapons of mass destruction throughout the country. Yet, I don't think any military commanders would have even contemplated the use of low-yield nuclear weapons, or any type of nuclear weapon. For one reason, if we had, we would still be miles away from Baghdad, because we could not occupy a place that was radiating plutonium. We would have caused significant civilian casualties. We would have caused a political firestorm that could never be contained in that part of the world and passed across the globe.

These are the practical considerations that deter us—not the fact that we do not have a low-yield weapon.

In addition, the “deterrent effect” may have the opposite effect on these rogue nations, as we think we are going to deter them.

Indeed, as Michael May, the former head of Lawrence Livermore National Laboratory, suggested, the emphasis on tactical nuclear weapons “increases the motivation of ‘targeted states’ to improve and extend their own nuclear force, or to get one if they don't have it.”

The behavior of North Korea and Iran, although clearly unjustified, might be prompted by such considerations.

The amendment I offer today is designed to do what I heard practically all of my colleagues say was the intent of this proposal by the administration—to allow scientists to do research but clearly to prevent the development, the testing, the fielding, and the use of nuclear weapons, particularly low-yield nuclear weapons.

The amendment I offer today would amend the current Spratt-Furse law so that research is allowed. Work beyond research would, however, remain prohibited.

Since 1953, the Department of Energy and the Department of Defense have worked in a very formalized weapons development process. In the DOE nuclear weapons development process there are a series of numbered phases of development. They are pictured in this chart. The top chart represents the development of a new weapon. There are eight phases as indicated in the chart. The bottom array is the development of or modification of an existing weapon such as the case would be with the robust nuclear earth penetrator. It is coming out of the stockpile, but it is still subject to the same clearly defined phases that have been

defined now for almost 50 years, concept assessment, feasibility, all the way through retirement.

The amendment I offer today would prohibit "development engineering," which is phase 3, or phase 6.3. Again, these are clearly identified phases. There will be no confusion in the Department of Energy or in the Department of Defense as to what is prohibited, what is allowed, and what is allowed as "reasonable." That is what I have heard consistently my colleagues say, that the whole purpose of this proposal by the administration and the development phases are well understood. They have been in use for 50 years. The phases were developed jointly by the Atomic Energy Commission, the predecessor to the DOE, and the Department of Defense in a memorandum of understanding signed in 1953.

Again, my amendment is very clear. It allows phase 1, phase 2, and phase 2-A activity for a new weapon. The red line comes at phase 3. It would allow phase 6.1, 6.2, and 6.2-A. The red line phase comes at 6.3 for the modification of existing weapons. Research is allowed, and everything else is prohibited.

The amendment is designed to allow what, as I said, the Bush administration claims is a primary reason to seek the repeal of the Spratt-Furse law—the need to "train the next generation of nuclear weapons scientists and engineers."

I and many of my colleagues do not support providing an open-ended authority to this or any other administration to develop, test, produce, and deploy new nuclear weapons. Unless we adopt this amendment or some variance of the amendment, that is precisely what we will be giving the administration.

The amendment would address the primary concern of ADM Ellis, Commander of Strategic Command, the command responsible for nuclear weapons.

In a letter to the Armed Services Committee, ADM Ellis stated that the "U.S. Strategic Command is interested in conducting rigorous studies of all new technologies and examining the merits of precision, increased penetration, and reduced yield for our nuclear weapons."

Nowhere is there a suggestion that he would like the permission to develop the test in the field of new weapons.

Again, if we are serious about arms control, and if we recognize the request for less stability in research, this amendment will be adopted. I hope it is. I would prefer, frankly, the restoration completely of the Spratt-Furse amendment. But this will, I think, do what must be done—prevent development, testing, and fielding of new nuclear weapons of the low-yield type.

I yield the floor.

The PRESIDING OFFICER. The Senator from Michigan.

Mr. LEVIN. Mr. President, the Senate has just voted to authorize the re-

search of new nuclear weapons for the first time since 1993. We have removed a prohibition on research which could lead to the production of nuclear weapons. This is a major shift, in my judgment, a terribly mistaken shift in policy because of the message it so clearly sends to the world that we are now going to walk down the road we are telling the rest of the world not to walk down.

The amendment which has been offered by Senator REED, of which I am a cosponsor, starts from that point. However, as the Senator from Rhode Island just described, it does not seek in any way to reverse what the Senate just did relative to the research that the opponents of the Feinstein-Kennedy amendment said was so important to protect. It accepts the decision of the Senate and the opponents of the Feinstein-Kennedy amendment—the argument made that research should not be prohibited. Senator REED's amendment does not prohibit research. Rather, it says we should not allow the development of these new weapons and, of course, any subsequent testing or deployment of those weapons; that if we are going to let the world know we are not committed to the deployment and the development of new weapons, we have to send a clear signal to the world of some kind that even though research would be allowed, nonetheless we are not going to raise the prohibition or lift the prohibition on the development of new nuclear weapons.

I believe it was a mistake to repeal the Spratt-Furse language. I think what we are doing is telling the North Koreans and the Iranians of the world that we are not going to tolerate your having nuclear weapons, but we are going to develop new nuclear weapons ourselves. It is a totally inconsistent position. It undermines our whole position and our standing in the world to argue that nations such as North Korea and Iran should not be allowed to have nuclear weapons.

It is mighty difficult to persuade even our Allies in the world that we should take strong measures to stop North Korea from getting nuclear weapons, and we should take strong measures to stop Iran from getting nuclear weapons, including working with the Russians to try to stop Iran from getting nuclear weapons, but, oh, by the way, we are going to do research and development on new nuclear weapons.

As the Senator from Rhode Island and others have said, this isn't just a matter of research, because the Deputy Assistant Secretary of Defense for Nuclear Matters puts it this way: "If a hydrogen bomb could be successfully designed to survive a crash through hard rock and still explode, it will ultimately get fielded"—I presume speaking for the administration.

So nobody should be, in any way, fooled that what we are talking about is just simply research. Unless we put a prohibition in to stop the development

of these weapons, what the world will believe—and I think accurately—is that it is not just research, it is development. Then, in the words of Fred Celec, the Deputy Assistant Secretary on nuclear matters: It will get fielded.

Now, the opponents of the last amendment said: Well, that is not what we are trying to do here. We are not trying to make any commitment to fielding a weapon or even developing a weapon. All we are talking about is research. And since the Spratt amendment prohibits research on weapons which could lead to their deployment and to their production, we think the Spratt amendment simply goes too far and should be repealed.

So what the Senator from Rhode Island does in his amendment is say: Well, then, for Heaven's sake, consistent with that—and to avoid sending a message which even the opponents of the Feinstein-Kennedy amendment said they do not want to send—let us keep the prohibition on the development of new nuclear weapons. That is all the amendment offered by Senator REED does.

It seems to me it is the least we can do to avoid sending a signal from the U.S. Senate that this country is now going down a road that we are saying no country should go down, which is the road of new nuclear weapons.

The former Assistant Energy Secretary, Rose Gottemoeller, in March of 2003 put it this way:

Other countries watch us like a hawk. They are very, very attentive to what we do in the nuclear arena. This is going to be considered another step in the tectonic shift.

She was referring to the repeal of the Spratt-Furse language.

I think people abroad will interpret this as part of a really enthusiastic effort by the Bush administration to renuclearize. And I think definitely there's going to be an impetus to the development of nuclear weapons around the world.

The greatest threat we face is the terrorist threat and the proliferation of weapons of mass destruction. We should do what we can to avoid sending a signal to the world that we are committed to the development of new nuclear weapons. The prohibition now has been lifted on research and development of new nuclear weapons, which could lead to their production.

Unless we adopt the Reed amendment, it will appear to the world—accurately—that this Senate is committed to the development of new nuclear weapons. I hope we are not going to make that commitment. It would be a terrible mistake for what it would unleash.

In order to avoid that commitment from being made, or from appearing to be made, to the rest of the world, we need the Reed language, which says that we are going to keep the prohibition of Spratt-Furse from the development stage on.

The Senate has spoken relative to research. The words again of the opponents, who have said: My Heavens,

under Spratt-Furse, you can't even do the research. Surely, we ought to allow scientists to think.

The Reed amendment is consistent with what the opponents of Feinstein-Kennedy said was their main reason for opposing the prohibition that exists in law. So I would hope that we could adopt the language that is in Senator REED's amendment, to indicate we, in fact, are not committed to the development of new nuclear weapons, and that we would not march down a road when we tell other nations they must not march down that road.

I yield the floor.

The PRESIDING OFFICER. The Senator from Virginia.

Mr. WARNER. Mr. President, I have listened very carefully to the arguments by my two distinguished colleagues, the Senator from Rhode Island and the Senator from Michigan.

The Senate has acted on repealing a portion of the ban, and I think it is important that the Senate be consistent and that it should be a total repeal unless it could be construed as not being the intention of the Congress to fully support the actions of the research in the first two steps.

My second-degree amendment would allow the entire repeal, as called for in the bill, to take place. But very importantly, I then make it eminently clear that not one step can go beyond the research phase unless—and I read section (c):

The Secretary of Energy may not commence the engineering development phase, or any subsequent phase, of a low-yield nuclear weapon unless specifically authorized by Congress.

Laws should be written that are clear, so they are understandable. This second-degree amendment absolutely places in the mind of every reasonable person who reads it precisely what is the intent of the Congress. And that intent is that this is approved to go forward in the vote we have just taken. In the second degree amendment to the pending amendment, it is clear that Congress is fully in charge, working with the executive branch. The Congress, and only the Congress, can authorize and appropriate the funds necessary to go one step beyond what the earlier amendment provided.

Very simple. I do not need to prolong this argument. The second degree amendment is eminently clear.

Mr. REED. Will the chairman yield for a question?

Mr. WARNER. Absolutely.

Mr. REED. I think I understand your second degree, but if I could, just for a moment—my amendment authorizes research activities in phases 1, 2, and 2-A, and 6.1, 6.2, and 6.2-A, and then prohibits the following phases. Your amendment would authorize work in these phases.

I think the difference is that rather than a clear prohibition, which would require someone coming back to the Congress and seeking to repeal the prohibition, you would require them to

come back and get an authorization to proceed. I think that is correct.

Mr. WARNER. I do not want to get tangled up in the terminology, but the bill, as passed out by the Armed Services Committee that is pending before us, repeals, in the entirety, the law that was passed in 1994.

Then you are coming along and saying: All right, I cede the ground that was authorized by this bill that just passed, but I wish to reimpose the limitation on the subsequent steps to the research.

All I am saying is, let's be consistent. We have repealed. Leave it repealed. But insert the Congress at precisely the point the Senator raises there and say: Not one step more until the authorization and appropriation takes place.

Mr. REED. Essentially, the functional difference between my amendment and your second degree is, at this point, under my amendment the administration would have to come and lift the prohibition; under your amendment, they would have to come and get an authorization. I think that is the functional difference.

Mr. WARNER. I think the Senator is correct.

Mr. REED. Let me say, if I may, again, we are united in the notion of allowing the research in these first three phases. We choose a different way to control government access in the succeeding phases. But the effect, I hope, at the end of the deliberations is that the development, engineering, testing, and deployment of nuclear weapons of low-yield will be subject to congressional authority.

Mr. WARNER. I think the advantages, if I may say with respect to my two highly esteemed colleagues, are that the second-degree amendment can be understood by anyone who can interpret the English language.

When I look at your amendment—I have been over here working it and reworking it—it leaves a little bit of a challenge.

Mr. REED. If the chairman will yield, that is why I have this chart, which is quite obvious, and it absolutely could explain your amendment, too.

I will lend it to you.

The PRESIDING OFFICER. The Senator from Michigan.

Mr. LEVIN. Mr. President, I am just comparing the two amendments. It seems to me in terms of directives, the simplicity of the Reed amendment has it all over the amendment of the Senator from Virginia. It is shorter than the Senator's amendment, if I am reading this amendment correctly. I want to make sure I have the right amendment before I make this statement. It looks like on page 2 at least there are 10 lines of type; is that correct? Am I looking at the correct amendment?

Mr. REED. I believe you are.

Mr. LEVIN. On the first page.

Mr. REED. It reads "03.857" on the upper left hand.

Mr. LEVIN. Correct. It is at least as simple as the amendment of the Sen-

ator from Virginia, which I understand is really a substitute.

Mr. WARNER. My esteemed colleague is absolutely correct.

Mr. LEVIN. When the Senator says it reimposes the limitation on development, the Senator is correct. It does do that.

Mr. WARNER. Which amendment are you discussing? The Reed amendment?

Mr. LEVIN. The Reed amendment, according to my dear friend from Virginia, would reimpose the prohibition on development that was just repealed in the bill's language and left in because of the defeat of the Feinstein amendment. That is correct.

Mr. WARNER. First, it has to be removed and nothing has been removed yet. The law of the land remains the same tonight as it has been since 1994. We are endeavoring to see what should be done about it. The bill reported out by our committee on a fairly significant vote in favor of repeal would have the effect of repealing it in its entirety.

Mr. LEVIN. That is correct.

Mr. WARNER. My amendment says, yes, carry forward with the intent of the majority vote in the Senate Armed Services Committee but put in the steps of Congress having to authorize and approve funds for each step subsequent to research.

Mr. LEVIN. And the Senator's amendment is useful.

Mr. WARNER. Which Senator's?

Mr. LEVIN. The Senator from Virginia, the Senator I am addressing.

Mr. WARNER. I wish we were arguing that case. Both of us were trial lawyers. If you had made that mistake on the floor of a trial courtroom, I would have you nailed right now.

Mr. LEVIN. I am glad we are not in a trial courtroom because you surely don't have me nailed here.

Mr. WARNER. You are working your way around trying to figure out exactly what it is you and the distinguished Senator from Rhode Island want to do.

Mr. LEVIN. It is quite clear what the Senator from Rhode Island and I want to do, which is maintain a prohibition on the development of new nuclear weapons. The difference is exactly what the Senator from Rhode Island said, which is that his amendment, which I have cosponsored, maintains a prohibition on development; whereas the amendment of the Senator from Virginia says the administration would have to come back for reauthorization.

The Senator from Virginia's amendment is valuable. As a matter of fact, I offered the amendment the Senator from Virginia is offering tonight in committee. It was defeated by one vote.

Mr. WARNER. In the committee?

Mr. LEVIN. In our committee I offered the amendment saying, come back for reauthorization because under the circumstances, having defeated what we just had previously defeated in committee, I thought that was the best that could be achieved. And we could

not achieve that because it was defeated by a 13-to-12 vote. I don't doubt there is value to what the Senator from Virginia is doing.

Mr. WARNER. Mr. President, I apologize. I did not intend to plagiarize your good work. Suffering from a middle-age crisis, I forgot that you might have done that.

Mr. LEVIN. I am delighted that the Senator from Virginia has offered this as a second-degree amendment. Believe me, if the amendment of the Senator from Rhode Island is defeated by the adoption of the amendment of the Senator from Virginia as a substitute, all of us would be very supportive of the amendment of the Senator from Virginia. Let it be clear that while there is value in it, there is not as much value in it as the amendment of the Senator from Rhode Island. It is not as clear a statement to the world that we are not committed to the development of new nuclear weapons.

What the Reed amendment says is: Development of these new weapons is prohibited. That is a very clear statement. The clarity of that statement is absolutely pure. It is a lot clearer in terms of assuring the world that we are not committed to the development of new nuclear weapons than is a statement such as the amendment offered by the Senator from Virginia which is, if you want to develop, come back to us for authorization.

I say that in all sincerity. I look the Senator from Virginia in the eye and say: His amendment, in my book, has value but not nearly the value of the amendment of the Senator from Rhode Island.

I hope we will adopt the amendment of the Senator from Rhode Island and defeat the substitute offered by the Senator from Virginia. But should the substitute prevail, I would in all good conscience vote for the substitute amendment if, in fact, it is substituted for the amendment of the Senator from Rhode Island.

Nonetheless, there is a much stronger statement made of reassurance to the world, a statement to the North Koreans and the Iranians of the world, that we are not committed to developing new nuclear weapons, if we say exactly that. That is what the amendment of the Senator from Rhode Island says. We are not going to proceed with the development, even though we are going to allow research on these new nuclear weapons.

I hope, again, the substitute is not agreed to and that the amendment of the Senator from Rhode Island is agreed to.

Again, I commend the Senator from Virginia because I do think that there is a contribution in his substitute amendment which is better than just simply repealing the Spratt-Furse language.

Mr. WARNER. Mr. President, I thank my colleague for what I interpret as kind words. We remain to have a difference of opinion as to the advis-

ability of not repealing this current prohibition in its entirety.

I have no further comments with respect to the pending amendments.

The PRESIDING OFFICER. Who seeks recognition? The Senator from Rhode Island.

Mr. REED. Mr. President, I believe on the amendment that I offered earlier today on missile defense, we have reached agreement. It might be appropriate at this time to call up the amendment.

Mr. WARNER. Mr. President, I am perfectly willing. That is a very good suggestion.

Mr. REED. Mr. President, I will lay aside the pending amendment. We are trying to identify the numbers so we can call up the amendment.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. REED. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

AMENDMENT NO. 711

Mr. REED. Mr. President, I ask unanimous consent to lay aside the pending amendment and call up amendment No. 711.

The PRESIDING OFFICER. Without objection, it is so ordered.

The clerk will report.

The legislative clerk read as follows:

The Senator from Rhode Island [Mr. REED], for himself, Mrs. FEINSTEIN, and Mr. FEINGOLD, proposes an amendment numbered 711.

The amendment is as follows:

(Purpose: To provide under section 223 for oversight of procurement, performance criteria, and operational test plans for ballistic missile defense programs)

Strike section 223, and insert the following:

SEC. 223. OVERSIGHT OF PROCUREMENT, PERFORMANCE CRITERIA, AND OPERATIONAL TEST PLANS FOR BALLISTIC MISSILE DEFENSE PROGRAMS.

(a) PROCUREMENT.—(1) Chapter 9 of title 10, United States Code, is amended by inserting after section 223 the following new section:

“§ 223a. Ballistic missile defense programs: procurement

“(a) BUDGET JUSTIFICATION MATERIALS.—(1) In the budget justification materials submitted to Congress in support of the Department of Defense budget for any fiscal year (as submitted with the budget of the President under section 1105(a) of title 31), the Secretary of Defense shall specify, for each ballistic missile defense system element, the following information:

“(A) For each ballistic missile defense element for which the Missile Defense Agency is engaged in planning for production and initial fielding, the following information:

“(i) The production rate capabilities of the production facilities planned to be used.

“(ii) The potential date of availability of the element for initial fielding.

“(iii) The expected costs of the initial production and fielding planned for the element.

“(iv) The estimated date on which the administration of the acquisition of the element is to be transferred to the Secretary of a military department.

“(B) The performance criteria prescribed under subsection (b).

“(C) The plans and schedules established and approved for operational testing under subsection (c).

“(D) The annual assessment of the progress being made toward verifying performance through operational testing, as prepared under subsection (d).

“(2) The information provided under paragraph (1) shall be submitted in an unclassified form, but may include a classified annex as necessary.

“(b) PERFORMANCE CRITERIA.—(1) The Director of the Missile Defense Agency shall prescribe measurable performance criteria for all planned development phases (known as “blocks”) of each ballistic missile defense system program element. The performance criteria shall be updated as necessary while the program and any follow-on program remain in development.

“(2) The performance criteria prescribed under paragraph (1) for a block of a program for a system shall include, at a minimum, the following:

“(A) One or more criteria that specifically describe, in relation to that block, the types and quantities of threat missiles for which the system is being designed as a defense, including the types and quantities of the countermeasures assumed to be employed for the protection of the threat missiles.

“(B) One or more criteria that specifically describe, in relation to that block, the intended effectiveness of the system against the threat missiles and countermeasures identified for the purposes of subparagraph (A).

“(c) OPERATIONAL TEST PLANS.—The Director of Operational Test and Evaluation, in consultation with the Director of the Missile Defense Agency, shall establish and approve for each ballistic missile defense system program element appropriate plans and schedules for operational testing to determine whether the performance criteria prescribed for the program under subsection (b) have been met. The test plans shall include an estimate of when successful performance of the system in accordance with each performance criterion is to be verified by operational testing. The test plans for a program shall be updated as necessary while the program and any follow-on program remain in development.

“(d) ANNUAL TESTING PROGRESS REPORTS.—The Director of Operational Test and Evaluation shall perform an annual assessment of the progress being made toward verifying through operational testing the performance of the system under a missile defense system program as measured by the performance criteria prescribed for the program under subsection (b).

“(e) FUTURE-YEARS DEFENSE PROGRAM.—The future-years defense program submitted to Congress each year under section 221 of this title shall include an estimate of the amount necessary for procurement for each ballistic missile defense system element, together with a discussion of the underlying factors and reasoning justifying the estimate.”.

(2) The table of contents at the beginning of such chapter 9 is amended by inserting after the item relating to section 223 the following new item:

“223a. Ballistic missile defense programs: procurement.”.

(b) EXCEPTION FOR FIRST ASSESSMENT.—For the first assessment required under subsection (d) of section 223a of title 10, United States Code (as added by subsection (a))—

(1) the budget justification materials submitted to Congress in support of the Department of Defense budget for fiscal year 2005

(as submitted with the budget of the President under section 1105(a) of title 31, United States Code) need not include such assessment; and

(2) the Director of Operational Test and Evaluation shall submit the assessment to the Committees on Armed Services of the Senate and the House of Representatives not later than July 31, 2004.

Mr. REED. I ask unanimous consent to add as cosponsors Senators FEINGOLD and FEINSTEIN.

The PRESIDING OFFICER. Without objection, it is so ordered.

AMENDMENT NO. 711, AS MODIFIED

Mr. REED. Mr. President, I ask unanimous consent that the amendment be modified with the changes at the desk.

The PRESIDING OFFICER (Mr. WARNER). The Senator has that right.

The amendment is so modified.

The amendment (No. 711), as modified, is as follows:

Strike section 223, and insert the following:

SEC. 223. OVERSIGHT OF PROCUREMENT, PERFORMANCE CRITERIA, AND OPERATIONAL TEST PLANS FOR BALLISTIC MISSILE DEFENSE PROGRAMS.

(a) PROCUREMENT.—(1) Chapter 9 of title 10, United States Code, is amended by inserting after section 223 the following new section:

“§223a. Ballistic missile defense programs: procurement

“(a) BUDGET JUSTIFICATION MATERIALS.—(1) In the budget justification materials submitted to Congress in support of the Department of Defense budget for any fiscal year (as submitted with the budget of the President under section 1105(a) of title 31), the Secretary of Defense shall specify, for each ballistic missile defense system element, the following information:

“(A) For each ballistic missile defense element for which the Missile Defense Agency is engaged in planning for production and initial fielding, the following information:

“(i) The production rate capabilities of the production facilities planned to be used.

“(ii) The potential date of availability of the element for initial fielding.

“(iii) The expected costs of the initial production and fielding planned for the element.

“(iv) The estimated date on which the administration of the acquisition of the element is to be transferred to the Secretary of a military department.

“(B) The performance criteria prescribed under subsection (b).

“(2) The information provided under paragraph (1) shall be submitted in an unclassified form, but may include a classified annex as necessary.

“(b) PERFORMANCE CRITERIA.—(1) The Director of the Missile Defense Agency shall prescribe measurable performance criteria for all planned development phases (known as “blocks”) of the ballistic missile defense system and each of its elements. The performance criteria may be updated as necessary while the program and any follow-on program remain in development.

“(2) The performance criteria prescribed for a block under paragraph (1) shall include one or more criteria that specifically describe, in relation to that block, the intended effectiveness against foreign adversary capabilities, including a description of countermeasures, for which the system is being designed as a defense.

“(c) OPERATIONAL TEST PLANS.—The Director of Operational Test and Evaluation, in consultation with the Director of the Missile Defense Agency, shall establish and approve

for each ballistic missile defense system element appropriate plans and schedules for operational testing. The test plans shall include an estimate of when successful performance of the element in accordance with each performance criterion is to be verified by operational testing. The test plans for a program may be updated as necessary while the program and any follow-on program remain in development.

“(d) ANNUAL TESTING PROGRESS.—The annual report of the Director of Operational Test and Evaluation required under section 232(h) of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107-107; 10 U.S.C. 2431 note) shall include the following:

“(1) The test plans established under subsection (c); and

“(2) An assessment of the progress being made toward verifying through operational testing the performance of the system under a missile defense system program as measured by the performance criteria prescribed for the program under subsection (b).

“(e) FUTURE-YEARS DEFENSE PROGRAM.—The future-years defense program submitted to Congress each year under section 221 of this title shall include an estimate of the amount necessary for procurement for each ballistic missile defense system element, together with a discussion of the underlying factors and reasoning justifying the estimate.”.

(2) The table of contents at the beginning of such chapter 9 is amended by inserting after the item relating to section 223 the following new item:

“223a. Ballistic missile defense programs: procurement.”.

(b) EXCEPTION FOR FIRST ASSESSMENT.—The first assessment required under subsection (d) of section 223a of title 10, United States Code (as added by subsection (a)), shall be an interim assessment submitted to the Committees on Armed Services of the Senate and the House of Representatives not later than July 31, 2004.

The PRESIDING OFFICER (Mr. TALENT). Will the Senator suggest the nature of the modification?

Mr. REED. The staffs have been collaborating all day. They have reached an agreement. The modifications make it clear that goals will be established with respect to the National Missile Defense Program. The modifications are acceptable to the majority and minority. I believe we have a meeting of the minds on all the details.

Mr. WARNER. The Senator is correct. The modification was reviewed on this side, and we are prepared to accept the amendment.

Mr. REED. I urge acceptance of the amendment at this time.

Mr. LEVIN. Mr. President, I commend the Senator from Rhode Island and all those who worked with him to make this amendment possible. It is a significant contribution to making our missile defense system more effective, both in terms of the cost and operational effectiveness. It fills some very important holes that otherwise would have existed, and it is his tenacity that made it possible.

Mr. WARNER. Mr. President, earlier today, when the amendment was being discussed, I did encourage the Senator from Rhode Island and the Senator from Colorado to see whether or not they could bridge the gap. They have done that.

So I compliment my good friend and fellow member of the Armed Services Committee, as well as the Senator from Colorado. They did a job that will be helpful.

The PRESIDING OFFICER. Without objection, the amendment, as modified, is agreed to.

The amendment (No. 711), as modified, was agreed to.

Mr. LEVIN. I move to reconsider the vote.

Mr. WARNER. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. LEVIN. Mr. President, I ask for the yeas and nays on the substitute amendment of Senator WARNER.

The PRESIDING OFFICER. Is there a sufficient second?

There is a sufficient second.

The yeas and nays were ordered.

Mr. WARNER. Mr. President, as a simple courtesy, I ask for the yeas and nays on the amendment of the Senator from Rhode Island.

The PRESIDING OFFICER. It is in order to request the yeas and nays on the underlying first degree amendment.

Is there is a sufficient second? There is a sufficient second.

The yeas and nays were ordered.

Mr. WARNER. I thank the Chair. This concludes the matters on the bill.

MORNING BUSINESS

Mr. WARNER. Mr. President, I ask unanimous consent that the Senate proceed to a period of morning business.

The PRESIDING OFFICER. Without objection, it is so ordered.

CONGRATULATING CHARLES MICHAEL DURISHIN

Mr. DASCHLE. Mr. President, today I offer my deepest gratitude and sincere congratulations to Charles Michael Durishin, Democratic staff director of the House Veterans' Affairs Committee, on the occasion of his retirement, last Friday. A good friend and a consummate professional, Mike has served in various capacities in Congress since 1973, including most of the last 16 years with the House Veterans' Affairs Committee.

I met Mike in 1972 on the Senate campaign of Jim Abourezk. We were hired within days of each other by Pete Stavrianos, one of my close friends and my longtime chief of staff. Mike and I quickly became friends on the campaign and, after the election, came to Washington together to work on Senator Abourezk's staff. I so respected his work that he was one of the first people I hired to join my own staff when I was elected to the House of Representatives in 1978. Mike worked with me, covering veterans issues, until 1986. At that time, I was a member of the House Veterans' Affairs Committee, and Mike matriculated to the committee staff.